



College of Arts and Sciences

# Being An Economist

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A Handbook for Students  
Interested in Economics

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Updated: Fall 2016





Department of Economics

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A Handbook for Students  
Interested in Economics

- **Why Study Economics?**
- **Degree Programs in Economics**
- **Graduate Study in Economics**

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# Table of Contents

|   |           |
|---|-----------|
| <b>PART I: WHY STUDY ECONOMICS?</b> .....                             | <b>1</b>  |
| THE STRUCTURE OF ECONOMICS .....                                      | 1         |
| MAJORING IN ECONOMICS .....   | 2         |
| THE BENEFITS AND COSTS OF STUDYING ECONOMICS .....                    | 4         |
| CAREER OPPORTUNITIES FOR ECONOMISTS .....                             | 7         |
| TABLE 1: CAREERS IN ECONOMICS .....                                   | 11        |
| <b>PART II: DEGREE PROGRAMS IN ECONOMICS</b> .....                    | <b>12</b> |
| FREQUENTLY ASKED QUESTIONS ABOUT THE BACHELOR'S DEGREE PROGRAMS ..... | 12        |
| CAS ECONOMICS B.A. DEGREE PROGRAM.....                                | 15        |
| CAS QUANTITATIVE ECONOMICS AND ECONOMETRICS B.S. DEGREE PROGRAM.....  | 20        |
| MASTER OF ARTS DEGREE PROGRAM.....                                    | 25        |
| PH.D. DEGREE PROGRAM.....   | 26        |
| COURSE OFFERINGS .....  | 26        |
| FACULTY .....   | 37        |
| RESOURCES .....   | 43        |
| <b>PART III: GRADUATE STUDY IN ECONOMICS</b> .....                    | <b>44</b> |
| PREPARING FOR GRADUATE SCHOOL.....                                    | 44        |
| SELECTING A GRADUATE SCHOOL .....                                     | 45        |
| TABLE 2: FIELDS OF SPECIALIZATION IN ECONOMICS.....                   | 46        |
| TABLE 3: TOP 10 ECONOMICS DEPARTMENTS.....                            | 47        |
| TABLE 4: U.S. SCHOOLS OFFERING THE PH.D. IN ECONOMICS .....           | 48        |
| TABLE 5: CALENDAR FOR GRADUATE SCHOOL APPLICANTS .....                | 54        |
| ECONOMICS AS AN AVOCATION .....                                       | 54        |

## PART I: Why Study Economics

*"Economics is such a neat discipline because, at the heart, it is a framework for making decisions and decisions are everywhere – individuals, companies, countries, local governments and organizations each face important decisions. The structure is very logical and analytical which lends a simplicity to even the most complex decisions. A glance at the many fields within economics reveals just how extensive is the reach of economics and where the skill-set acquired when studying economics can be applied. Even within each field, there are a multitude of directions one can take, depending on his/her interests. Although I did not previously have the formal framework for decision-making, I could not have chosen a better field of study, and even as my areas of interest have shifted over the years, economics was comprehensive enough to remain my discipline." USF Economics Ph.D. student, Robyn Kibler*

Now that you have completed your first course in economics, it is time to consider how to use what you have learned, whether to take other economics courses, and perhaps whether to consider economics as a major or minor field of study. The purpose of this handbook is to provide you with information to help you make the right decision.

In Part I, reasons for taking (and avoiding) courses in economics are presented. All potential majors should carefully read Part I of this manual before declaring an Economics major. Part II describes the Economics program at the University of South Florida (USF). Part III presents a variety of information concerning graduate study in economics. This handbook provides information for USF students seeking to major in economics through the College of Arts and Sciences (CAS). You will find biographical information on Economics faculty, and descriptions of the elective courses offered.

### The Structure of Economics

*Economics professor, Dr. Phil Porter, on why he chooses to study economics ... "I was drawn by the human need to understand how markets work and by the logical way economics addresses this question."*

Where does economics go after the basic principles courses? The topics covered in the principles courses give you some idea of the content of intermediate and advanced courses. The core of undergraduate economics, after principles, is Intermediate Price Theory and Intermediate Macroeconomics. Each of these courses reviews and expands on the theoretical topics studied at the principles level.

Traditionally, undergraduate Economics majors or minors take at least one applied course in the area of Microeconomics, such as Labor Economics, Regulation and Antitrust, or Law and Economics, and one applied Macroeconomics course, such as International Macroeconomics or Economic Growth. These courses are a blend of theory, institutions, and policy questions. Students who are interested in applying economics to data problems will want to take a course in

Econometrics (application of statistical methods to economic questions) and perhaps Mathematical Economics.

Economics majors can round out their curricula with courses in specialized areas involving applications of both Micro and Macroeconomics, such as Public Finance, International Economics, Environmental Economics, Economic Development, History of Economic Thought, and Radical Political Economics. Related courses may come from the other social sciences: sociology, political science, psychology, history, and international studies. A good dose of mathematics and statistics is not only helpful in undergraduate economics courses, but also good preparation for careers in government or business, or for graduate study.

## Majoring in Economics

*"As I spend more time as both an instructor and researcher working towards finishing my dissertation, a few general themes have presented themselves as omnipresent throughout economics. We live in a complex world where difficult decisions must be made every day ... how long should I study for the next exam, what will my next large purchase be, how will switching majors effect my future? As economists, our job is to study these decisions and help determine the optimal choices given constraints such as time, budget, and preferences. I find it difficult for students not to be engaged when discussing such topics. After putting it in such terms, it is clear that economics is involved in nearly every aspect of our life. A degree in economics will help open doors for a wide variety of career choices ... it is truly one of the few majors that are applicable to nearly every field." – USF Economics Ph.D. student, John Hartman*

*British Economist, Alfred Marshall, wrote, "Economics is a study of mankind in the ordinary business of life."*

You will find that an Economics major prepares you for many professional careers, because economics offers a way of thinking about the ordinary business of life that is clear, concise, and rigorous. Job recruiters and graduate admissions committees are favorably inclined toward Economics majors as candidates for jobs or graduate work in a variety of fields.

One enduring strength of economics is its logical, ordered way of looking at problems and issues. Economics is at the same time the most applied, quantitative, and scientific of the social sciences, and the most theoretical of business degrees. It draws on history, philosophy, and mathematics to confront topics ranging from how households or businesses can make sound decisions to societal issues such as unemployment, inflation, crime, and environmental decay.

An undergraduate Economics major can be ideal preparation for working toward a Master of Business Administration (MBA) degree at a graduate business school, leading to a career in business management. Most business graduate schools encourage students to take at least some economics courses before starting graduate school. In fact, many of the best business graduate schools prefer students with a broad liberal arts background, which an Economics major can provide.

A large part of the content of a MBA program is based on economics. Economics provides the theoretical background for many business courses. In the competition for top grades in a graduate program, there is an advantage in already being familiar with the central ideas of economics.

Furthermore, an MBA program emphasizes making good business policy decisions. One important approach to those decisions is through economic reasoning. It is certainly helpful to have acquired some skill at this sort of thinking as an undergraduate.

If you plan to be a lawyer, an Economics major offers excellent preparation. Many law schools believe that economics represents one of the best backgrounds for the study of law because economics takes a logical, ordered approach to problems. Specific courses recommended for pre-law students include Intermediate Price Theory, Regulation and Antitrust, Public Finance, Economics of Crime, and Law and Economics. In fact, a study of Law School Admission Test (LSAT) scores found that Economics undergraduate majors performed at or near the top of all majors taking the test.<sup>1</sup>

Graduate training in public policy or public administration, as a preparation for a governmental career in policy analysis, also requires a strong economics background. Virtually every public policy issue has a substantial economic dimension, so Economics majors have a head start in such programs.

Job opportunities are also good for Economics majors who don't go on to graduate school. Governments — federal, state, and local — employ economists in many roles. Private business firms, particularly banks and other financial institutions, also employ economists. Business firms employ Economics graduates to analyze economic conditions, forecast sales, and also to do non-specialized work in sales and management. Students with a strong background in both economics and at least one foreign language may have some exciting opportunities available with multinational corporations.

Many economists are employed in colleges and universities, both as professors and administrators. In general, graduate degrees are required for such positions: a Master's degree for two-year colleges and a Ph.D. for four-year institutions. Numerous economists are employed in international agencies in development planning and policy studies by the Agency for International Development, the United Nations, and the U.S. State Department. Many economists do private research, working as consultants to corporations and government agencies.

Finally, an Economics degree may lead to graduate study and to a career as a professional scholar or teacher. For the nation as a whole, approximately 10% of Economics majors complete a Master's degree in the subject, and 10% of these complete a Ph.D. degree.

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<sup>1</sup> Nieswiadomy, Michael, *LSAT Scores of Economics Majors: The 2012-13 Class Update (January 24, 2014)*. Available at: <http://dx.doi.org/10.1080/00220485.2014.859964>

## The Benefits and Costs of Studying Economics

*Economics professor, Dr. Joseph DeSalvo, on why students should study economics at USF ... "Our faculty members, mostly with Ph.Ds. from leading institutions, excel in both teaching and research. They are also willing to spend one-on-one time with students which is rare at other universities."*

College education is only the beginning of a long road that will have countless twists and turns. There is ample time to change jobs and careers. It is for precisely this reason that economics is a good major. You need to prepare yourself to take advantage of whatever opportunities become available. Economics provides a good foundation for such changes because it teaches a disciplined way to analyze and to make choices.

### Reasons for Studying More Economics

Pay attention to the Economics majors who are juniors and seniors. They enjoy what they are learning because it is challenging and relevant. It is fun to understand subjects that baffle other students and the general public — maybe even your parents. It is also fun to major in a subject that enjoys prestige. You can wear your Economics major with pride.

*Economist, John Maynard Keynes, tried to capture what was unique about the competent economist in these words: "... the master economist must possess a rare combination of gifts. He must be a mathematician, historian, statesman, philosopher — in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for purposes of the future. No part of man's nature or his institutions must lie entirely outside his regard."*

If that sounds like the kind of thinking that challenges your skills, economics may be where you belong.

You are already aware, from your study of introductory economics, of some reasons why many students find economics a challenging area for undergraduate study, while others choose to avoid it. Here are some good reasons for studying economics.

### Economics Deals With Vital Current Problems

Inflation, unemployment, monopoly, mergers, economic growth, pollution, free markets versus central planning, poverty, productivity, and other headline issues are all covered in the study of economics. Economics is a problem-based social science, and the problems with which it is especially concerned are among the central issues of our times. These issues fill newspapers and pervade politics. Economics is relevant not only to the big problems of society, but also to personal problems, such as jobs, wages, unemployment, the cost of living, taxes, and voting.

## **Economics is a Successful and Prestigious Social Science**

The accomplishments of economics have established it as perhaps the most successful social science. No other social science has had equivalent impact in applying reason and science to the shaping of the nation's social destiny. No other social science has a Nobel Prize. The Council of Economic Advisers is unique; no such permanent agency exists for any other social science. Indeed, few scientists of any kind enjoy so much prestige as the economists Paul Samuelson and Milton Freidman.

## **Economics Uses Theoretical Models and the Scientific Method**

Some students become impatient with the seemingly endless array of conjecture and descriptive material that characterizes much of the social sciences. Economics offers a social science with models for organizing facts and for thinking about policy alternatives. Because economics deals with prices and numbers, and because so many of its magnitudes are objectively measurable, economic theory is more fully developed than most other kinds of social theory. Many students find this rigor and completeness one of the attractive aspects of studying economics.

Sometimes students view math as a fascinating game or language, but are impatient at not being able to use it for human problems. While mathematics is increasingly used by all the social sciences, economics has long been in the forefront in this respect. A student with a background in algebra, geometry, calculus, and statistics finds many places to use these skills in economics.

## **Economics Majors Have Many Career Options**

As noted earlier, economics leads to a diversity of career opportunities. These include careers in business, law, journalism, teaching, educational administration, politics, finance and banking, government service, public and private overseas service, labor leadership, or graduate study in a related professional area, such as law, business, or public administration.

Employers, particularly business firms, looking for liberal arts graduates often favor Economics majors because these students are a preferred employment risk. The demands of the Economics major itself tend to drive away the less ambitious, while many better minds are attracted to it. Thus, an Economics degree may prove to be a valuable credential. A good grade point average (GPA) in economics courses speaks for itself. The payoff goes beyond getting a job; the salaries of economists, both academic and non-academic, tend to be higher than those of other social scientists and many other business majors.

## **What Some People Have Done With an Economics Major**

- Steve Ballmer, CEO of Microsoft
- Cate Blanchet, Actress
- John Elway, NFL Quarterback
- Gerald Ford, Ronald Reagan, Presidents of The United States
- Millard Fuller, Founder of Habitat for Humanity
- Billy Kidd, Professional Skier
- Jeremy Lin, NBA Player



- Sandra Day O'Connor, First female Justice of Supreme Court
- Lionel Richie, Singer/Songwriter

(All information compiled by Dr. Greg Delemeester at [www.marietta.edu](http://www.marietta.edu).)

## **An Economics Major Prepares Students for Community Leadership**

A knowledge of economics and an understanding of current economic institutions and problems are not only essential for certain occupations, but for leadership roles as well. Economics can serve as an avocation as well as a career foundation. As a person knowledgeable about economics, you may play a leading role in a local or national political party, a civic club or organization concerned with the local economy, a union or teacher's association, or be an informed commentator on current issues in any setting. Few disciplines are equal to economics in preparing one to be an interested, interesting, and understanding observer of passing events and a leader in making decisions that require understanding economics.

## **Reasons for Avoiding Courses in Economics**

There are reasons why students avoid studying economics. Other disciplines may simply be more attractive; something else may interest students more. Here are some reasons for avoiding economics.

## **Economics is a Quantitative Social Science**

Some students find that mathematical thinking is difficult, or they simply lack a mathematical background or interest. While it is true that much of economics is presented in a narrative-descriptive form, mathematics is frequently employed as a way to understand economic phenomena because of its greater precision and clarity. It is possible, however, for a student who has only a basic knowledge of algebra, geometry, and introductory calculus to major successfully in economics. Lack of interest and ability in mathematics, however, would make it unlikely that such a student would do well in graduate studies in economics.

Science, even social science, is a bore to some students and a threat to others. They are unwilling to employ a method that begins with careful observation and proceeds to hypotheses, then to testing and possible verification, and finally to a tentative conclusion. If you are unwilling to accept the constraint of scientific methodology, perhaps you should look elsewhere for a major.

## **Economics Involves Abstract Thinking and Theory**

Some students have an aversion to theoretical thinking. They defend their aversion by saying that theory is impractical or irrelevant. Their minds thrive on the concrete, the real, but they are turned off by theory. Underlying this attitude is a valid complaint. Teachers of a science, such as economics, that has developed an extensive theoretical system sometimes make mastery of theory the primary goal of their teaching, rather than using theory as a tool for understanding real problems. Thus, students may legitimately complain that, while economics is potentially the most relevant of the social sciences, it is sometimes taught as if it is hardly related to the real world. You can overcome this problem by mixing theory courses with applied, policy-oriented courses or by challenging your professors to offer more concrete examples and applications of theory.

## Economics is a Narrowly Focused Discipline

Other social sciences often study society or societies as a whole, including their economic aspects (for example, anthropology, history, or sociology). Economics tends to exclude many very important aspects of society. It usually takes as given the tastes and preferences, the family relationships, the political structures, and the goals of society, and leaves those questions to other fields of study.

If social science or social philosophy is what you really want to study, then you should consider another major. On the other hand, if the economic side of life really fascinates you, and you want to put what you learn in your economics courses in the context of social institutions and social philosophy, you could major in economics and use electives outside of economics to broaden this sometimes narrowly focused discipline.

## Economic Reasoning Can Seem Stifling

Economists are always considering costs; that is, they are constantly reminding people that choices usually are made at the cost of other things. Economics is a conservative science in that it seems to make people aware of possible costs of change. The economic way of thinking may lead to an obsession with efficiency, i.e. with improving the organizations of society with the purpose of attaining whatever society values. In its defense:

*Alfred Marshall said, "Economics is a science concerned with the 'material means to a refined and noble life.'"*

Before it is possible to be creative, it is first necessary to be productive.

If you are a creative person, you might want to combine an Economics major with some complementary discipline, perhaps from the creative arts. Such a combination might enable you to become an intellectual leader in the effort to broaden the scope and perspective of economics or to develop new applications of old methods to achieve new purposes. Economics is an evolving social science, and you could play a role in its evolution.

## Career Opportunities for Economists

*Jacob Viner, the teacher of many great economists, once described the nature of the discipline as, "Economics is what economists do."*

What is it that an economist does? According to the National Science Foundation, an economist is someone who has had professional training in economics at the graduate level and is a member of a professional group, such as the American Economic Association (AEA) or the National Association of Business Economists (NABE).

The economist's job title may or may not include the word economics or economist, particularly if his or her background is limited to an undergraduate major in economics. Instead, a Bachelor of Arts (B.A.) economist is likely to have a job that makes use of training in economics as a basis for a

position in personnel, management, marketing, education, or some other field.<sup>2</sup> Undergraduates apply for jobs with titles such as analyst (in finance or marketing or government policy, for example), manager, planner, coordinator, teacher, or consultant, but rarely economist. If you want to be an *economist* as such — to pursue one of the three traditional career paths of academia, government, or business — you will usually need graduate training.

### The Academic Economist

Almost half of all professional economists are college teachers. A Ph.D. degree is essential to teach at a four-year college. Junior college instructors usually have a Master's degree in economics, but a Ph.D. or work toward a Ph.D. may be required.

A new Ph.D. generally begins an academic career as an assistant professor. Most starting salaries in 2014 ranged from \$101,000 to \$132,000<sup>3</sup>, depending on the academic program of the university. Salaries vary widely with the type of school and the area of the country, as well as the particular skills and area of specialization that the new faculty member has to offer. Responsibilities usually include teaching from two to four courses a term. Promotion to associate professor and tenure (permanent employment) typically takes from three to seven years. At more prestigious schools, the rule for promotion and tenure is "*publish or perish*." Faculty members must publish articles (and, increasingly, obtain research grants) in order to be promoted. Promotion to the full professor rank usually occurs from five to 15 years after the promotion to associate professor, depending on the candidate's research record, publications, and teaching ability.

Academic economists often supplement their incomes by writing textbooks and other educational materials and by consulting. In recent years, economists have provided consulting services for a variety of clients in such diverse areas as environmental quality, health care, public education, the value of human life in lawsuits, rural development, and industrial location.

### The Business Economist

The rapidly growing professional field of Business Economics reflects the increased use of economics as a business tool. For many years the business community disdained academic training and expressed a preference for practical experience. Early business schools were largely training grounds for middle managers, founded to teach accounting and practical management skills. Any contact that these early business students had with economics was accidental and usually unsatisfactory; economists were considered theoretical ivory-tower dreamers. Bernard Baruch, the famous industrialist, was reported to have defined an economist as a man with a Phi Beta Kappa key on his watch chain, but no watch!

Today's economics courses play a major role in the general business curriculum. The increased interest in the uses of economics in business is also reflected in the increasing number of graduate-trained economists in the business community and on the faculty of business schools.

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<sup>2</sup> Very few undergraduate degrees lead to jobs in which the job classification is the same as the student's major. Accounting and engineering are two exceptions to this rule.

<sup>3</sup> Based on 83 reporting universities in the American Economic Association UAQ Summary 2014.

Economists today are found throughout the business community from top management positions down through the company hierarchy.

It is most likely that an economist would begin a business career in a firm's Economics Department. These organizational divisions undertake a variety of tasks, including forecasting the general business environment and how it might affect markets in which the particular firm operates, interpreting the effects of governmental policy on the firm, and gathering and processing economic data. From this beginning, the economist may move into the management side of the business organization. In this manner, the economist is following the same career path often pursued by engineers, accountants, and lawyers who work for private business firms. Business economists receive excellent salaries and are in great demand. The largest employers of economists, according to the NABE are firms engaged in manufacturing, banking, business services, and securities and investments. In 2014, persons with an Economics Bachelor's degree received a median starting salary of \$71,400 a year; a Master's degree received a median starting salary of \$111,000<sup>4</sup>.

### **The Government Economist**

Since the New Deal era in the 1930s, economists have moved into the forefront of governmental policy analysis. In recent years, economists have begun to displace political scientists and lawyers in top government administrative posts. Recent presidential cabinets have included a high proportion of economists.

There are positions for economists in every federal governmental agency, primarily as policy analysts. A few positions are available at junior grades for economists with undergraduate degrees, but most government economists must possess an Economics Master's or Ph.D. degree. There are jobs for labor economists, international economists, agricultural economists, development economists, public finance economists, and population economists, as well as macro and micro economists. The duties of a governmental economist are very diverse and in large part depend on the particular governmental agency. For example, in the State Department or the CIA an economist might become an expert on the economy of a particular country; in the Office of Management and Budget, an expert in a program area such as welfare or health care; and at the Treasury, a specialist in tax policy.

Until the 1970s, except for the Joint Economic Committee, very few congressional committees or individual congressional staffs hired economists. Since 1974, the Congressional Budget Office, which is staffed by economists, has become an important research arm of Congress. It serves the same research role as the Office of Management and Budget does for the President. Legislation and issues facing Congress are becoming increasingly complex and economic in nature. As a result, Congress is turning to economists for expert advice on these issues.

Salaries for government economists vary by region. In 2015, in Florida, an individual with a B.A. or a Bachelor of Science (B.S.) degree and at least 21 semester hours in economics could get a job at the GS5 or GS7 level, which paid a starting salary of \$33,799 and \$41,868, respectively. An Economics Master's degree qualifies one to start work at the GS9 level at \$51,214 per year, and a

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<sup>4</sup> 2014 Biennial Salary Survey, NABE

Ph.D. qualifies an individual to start work at the GS11 level at \$61,963 per year<sup>5</sup>. For more information on jobs with the federal government, visit [www.usajobs.gov](http://www.usajobs.gov).

Another area of employment for economists is in state and local government. State government economists play a wide variety of roles, just as they do in the federal government, but there are a few differences.

State economists are more likely to be involved with Microeconomic problems and issues because states do not carry out independent monetary and fiscal policy. They are also likely to be less narrowly specialized, working on a variety of problems and issues. Developing strategies for state economic development, compiling state economic indicators, interpreting the impact of changes in federal policy on state agencies and programs, and developing good state and regional data bases are all important responsibilities for state government economists. Almost all state governors now have the services of at least one economist in a high administrative position.

At the state and local level, the primary areas of research by economists are labor market analysis, school finance issues, state and local taxation and tax reform, natural resource and environmental issues, and budget expenditure analysis. Economists are also moving into important administrative responsibilities in state and local government.

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<sup>5</sup> U.S. Office of Personnel Management, *Salaries and Wages*

## Table 1: Careers in Economics

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|                                 |   |
|---------------------------------|---|
| <b>ACADEMIC:</b>                | Teaching, research and writing and/or administration at a <ul style="list-style-type: none"><li>▪ major university</li><li>▪ graduate school</li><li>▪ state college</li><li>▪ small private college</li><li>▪ junior college</li><li>▪ technical school</li><li>▪ secondary school</li></ul>                                   |
| <b>RESEARCH:</b>                | In a private or public economic research organization   |
| <b>BUSINESS:</b>                | Forecasting, planning, and other economic tasks for <ul style="list-style-type: none"><li>▪ banks and financial institutions</li><li>▪ manufacturing</li><li>▪ wholesale and retail trade</li><li>▪ multinational firms</li></ul> Consulting for private firms and public agencies<br>Economic journalism<br>Marketing research |
| <b>SPECIAL INTEREST GROUPS:</b> | Economic advisor, interpreter, defender, speech writer for <ul style="list-style-type: none"><li>▪ lobbying/research organizations</li><li>▪ political party candidate</li></ul>  |
| <b>GOVERNMENT:</b>              | Policy analysis or statistical work for <ul style="list-style-type: none"><li>▪ international agencies</li><li>▪ federal, state, or local government</li></ul>  |

## PART II: Degree Programs in Economics

### Frequently Asked Questions about the Bachelor's Degree Programs

This section answers a number of commonly asked questions which deal mainly with curriculum matters. While this section of the handbook is designed to help you, it is not the final word on requirements. The university catalog is the official statement of requirements and all students should study it carefully.

#### All Economics Majors

##### *HOW DO I BECOME AN ECONOMICS MAJOR?*

Go to [www.cas.usf.edu/declare](http://www.cas.usf.edu/declare) and complete the on-line form. You'll need to log in using your USF NetID and password.

There are two types of Economics majors:

- **Economics B.A.:** Best suited for students interested in general analyst position, law school, MBA or Public Policy programs.
- **Quantitative Economics and Econometrics B.S.:** For those planning on graduate school, or who are more mathematically inclined.

As an Economics major in the CAS, you must take a foreign language and usually have enough elective credit hours to double major, minor, or take a variety of courses outside your major. Depending on which major you choose, you will either receive a B.A. or B.S. degree when you graduate. A B.S. degree will **not** require a foreign language.

##### *HOW DO I START THE MAJOR? WHICH COURSES DO I TAKE FIRST?*

Generally, students take ECO 2013 Macroeconomic Principles in their first semester, and ECO 2023 Microeconomics Principles in their second semester. To meet the statistics requirement, students take STA 2023 or QMB 2100 and QMB 3200 in these first two semesters. It should be noted that students cannot take QMB 3200 until Junior standing is accomplished, and MAC 2233 or MAC 2311 is completed. It is also encouraged that students take MAC 2233 or MAC 2311 within their first and/or second semester as it is a prerequisite for additional economics courses the students will need to take as they progress through the Economics major. Alternatively, students who feel less confident in their math skills can take ECO 2052 Analytical Tools for Economists.

### ***HOW MANY HOURS CAN I TAKE IN A SEMESTER?***

Depending upon your work schedule and which courses you are taking, 12 to 15 hours is about average. Excellent students sometimes take more. Students who work may take less. If your GPA is low and you need to raise it to graduate, do not try to take more hours in a semester. Take fewer courses and make sure you do well!

### ***WHAT IS THE FOREIGN LANGUAGE REQUIREMENT?***

There are two foreign language requirements: one for entry to USF (FLENT) and one to exit (FLEX). FLENT is met by taking two years of foreign language in high school. FLEX is met by taking two semesters of the same foreign language with a grade of C or better in the second semester or by demonstrating competency by passing an exam.

### ***WHAT IF I DIDN'T HAVE ANY FOREIGN LANGUAGE IN HIGH SCHOOL?***

USF sometimes admits students who graduated from high school out of state or before the requirement was established. If you didn't meet the FLENT requirement, you may satisfy it by taking two semesters of the same foreign language at the college level. If you receive a grade of C or better in the second semester, this also satisfies the exit requirement.

### ***CAN I TAKE AMERICAN SIGN LANGUAGE AS MY FOREIGN LANGUAGE?***

Yes. American Sign Language has been approved as a foreign language by the Economics Department.

### ***WHAT ARE THE FOUNDATIONS OF KNOWLEDGE AND LEARNING REQUIREMENTS?***

The Foundations of Knowledge and Learning (FKL) requirements consist of six semester hours each of English Composition, Mathematics and Quantitative Reasoning, Natural Sciences (one physical and one life science), Social and Behavioral Sciences and Humanities, and three semester hours each of Fine Arts and Human and Cultural Diversity in a Global Context. Each student must also have 6 credits of courses that meet the Human Historical Context and Process courses.

**Note:** ECO 2013, Principles of Macroeconomics fulfills three hours of the Social Science requirement.

The second component, called the Exit requirement, consists of three semester hours of Capstone courses and three semester hours of Writing Intensive courses. These courses must be taken at USF. Courses that meet these requirements are listed in the University catalog.

### ***WHAT IS THE GORDON RULE?***

The Gordon Rule requires students to take, in addition to the two English composition classes, two writing classes and two math classes. You must earn C grades in order to satisfy the Gordon Rule. There is a complete list of Gordon Rule courses in the University catalog.



### *WHAT ARE REPEAT COURSE SURCHARGES?*

Florida legislature requires USF to charge students the full tuition cost (equivalent to non-resident tuition) when they repeat a class three or more times. All attempts (including W, S/U, and I grades) are counted.

# CAS Economics B.A. Degree Program

## *WHAT ARE THE REQUIREMENTS TO ENTER THE MAJOR?*

There are no requirements to enter the major. If you are enrolled at USF, you are eligible.

## *WHAT ARE THE REQUIREMENTS TO GRADUATE?*

In order to graduate you need:

- 120 total credit hours
- 42 or 48 credit hours in upper level courses number 3000 or higher, depending on catalog year. Please follow up with the academic advisor.
- to meet the FKL requirements
- to meet the Gordon Rule requirements
- to fulfill the foreign language requirement
- to meet all the major requirements
- to maintain a 2.0 GPA in your major, USF, and overall grades
- a minimum of nine hours of summer hours
- 12 credit hours of upper level 3000 or 4000 economics elective course work must be taken at USF Tampa
- 30 hours out of your last 60 hours must be taken at USF Tampa
- 80 hours outside the major

## *DO ALL MY GRADES HAVE TO BE A "C" AND ABOVE?*

### **Starting in Fall 2012:**

For students in the 2012-13 undergraduate catalog, you must obtain a grade of C- or higher in all courses required for the major or minor in Economics. In addition, a grade point average of 2.0 or better must be maintained in major or minor coursework.

### **Students Prior to Fall 2012:**

You must earn a C- or better in Macro or Micro Principles, Intermediate Price, and any economics course that is a prerequisite to another course. In addition, you must maintain a 2.0 grade point average for your major. If, for example, you have a D in one course, you must have a B in another course to balance it out.

### **Department of Economics D/F Policy:**

All students entering USF for the first time in Fall 2012 or later, who earn three D and/or F grades in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) will be required to change their major to a major more appropriate to their goals and

academic performance, and to a major that is not conferred by the Economics Department through the CAS.

All continuing students who entered USF prior to Fall 2012, who have NOT earned any D or F grades in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) by the beginning of Fall 2012, will also be allowed **three D and/or F grades** in those courses before being required to change their major to a major more appropriate to their goals and academic performance, and to a major that is not conferred by the Economics Department through the CAS.

All continuing students who entered USF prior to Fall 2012, who HAVE earned one or more D or F grades in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) by the beginning of Fall 2012, will only be allowed **two more D and/or F grades** in those courses before being required to change their major to a major more appropriate to their goals and academic performance, and to a major that is not conferred by the Economics Department through the CAS.

Grade forgiveness will NOT apply to the mandated requirement of changing majors.

#### ***WHAT ARE THE UPPER LEVEL HOURS I NEED?***

Students prior to Fall 2015 will need to complete 48 credit hours that are numbered 3000 and 4000. When you complete your major and exit courses you will have earned 21 of those hours. The other 21 hours can be in any other area or department.

Students starting in Fall 2015 will need to complete 42 credit hours that are numbered 3000 and 4000. When you complete your major and exit courses you will have earned 15 of those hours. The other 15 hours can be in any other area or department.

#### ***WHAT ARE THE ECONOMICS B.A. MAJOR REQUIREMENTS?***

There are 33 credit hours of economics courses in the major. The 18 hours of required courses are Macro and Microeconomic Principles, Analytical Tools for Economists (or Calculus I), Introductory Statistics I, Intermediate Price Theory, and Intermediate Macroeconomics. The other 15 hours are economics electives, which you may choose from among those offered in any semester. About six are offered each semester. The selection changes from semester to semester.

### ***WHO WILL BE MY ADVISOR?***

CAS Economics majors are advised by the department advisor located in room CMC 206B. Appointments can be made via the e-scheduler system.

USF Students: <http://eschedule.forest.usf.edu/login.aspx>

Non-USF Students: <http://eschedule.forest.usf.edu/nonstudentlogin.aspx>

### ***HOW OFTEN SHOULD I SEE THE ADVISOR?***

You should see the advisor every semester. The advisor will help you intentionally discuss the merits of an Economics major, and discuss options for future academic planning.

The advisor will help you balance your workload so that you don't take several difficult classes in the same semester or fail to satisfy the prerequisites for courses you need.

At the end of the advising session, the advisor will make a record of the economics courses you need and give you a copy for your use.

### ***HOW DO I APPLY TO GRADUATE?***

In the first two weeks of the semester in which you plan to graduate, complete the graduate application online through your student OASIS account. If you haven't had a graduation check completed, visit the advisor and do it now. Don't wait until the last minute. The advisor may not be available when you get around to it.

If you plan to participate in the commencement ceremony, please register at the commencement ceremony website: <http://usfweb2.usf.edu/commencement/index.asp> within the first two weeks of your respective graduation semester.

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Here is a worksheet for the CAS Economics B.A. major. Use it and the list of requirements on the previous page to see if you have all the classes needed for graduation.

## CAS Economics B.A. Degree Checklist

Refer to USF Catalog for more detail.

Name \_\_\_\_\_ U # \_\_\_\_\_  
 USF GPA \_\_\_\_\_ Overall GPA \_\_\_\_\_

| <b>HOOR CONSTRAINTS:</b> | Have  | Need  |
|--------------------------|-------|-------|
| USF (30)                 | _____ | _____ |
| Upper level (48 or 42)   | _____ | _____ |
| Summer (9)               | _____ | _____ |
| Outside major (80)       | _____ | _____ |

| <b>MAJOR REQUIREMENTS (18):</b>    |       |       |
|------------------------------------|-------|-------|
| ECO 2013 Macro Principles          | _____ | _____ |
| ECO 2023 Micro Principles          | _____ | _____ |
| ECO 3101 Intermediate Price Theory | _____ | _____ |
| ECO 3203 Intermediate Macro        | _____ | _____ |
| STA 2023 Stat I                    | _____ | _____ |
| ECO 2052 Analytical Tools          | _____ | _____ |

| <b>MAJOR ELECTIVES (15):</b> |       |       |
|------------------------------|-------|-------|
| _____                        | _____ | _____ |
| _____                        | _____ | _____ |
| _____                        | _____ | _____ |
| _____                        | _____ | _____ |
| _____                        | _____ | _____ |

Major GPA \_\_\_\_\_  
 Major residency (12 UL Hours) \_\_\_\_\_

| <b>FKL REQUIREMENTS (42):</b>       |       |       |
|-------------------------------------|-------|-------|
| General Education (36)              |       |       |
| Engl. Comp. (6)                     | _____ | _____ |
| Quant. Methods (6)                  | _____ | _____ |
| Natural Science (Life/Physical) (6) | _____ | _____ |
| Social Science (6)                  | _____ | _____ |
| Humanities (6)                      | _____ | _____ |
| Fine Arts (3)                       | _____ | _____ |
| Hum. & Cult. Div. & Global (3)      | _____ | _____ |
| HHCP (6 credits)                    |       |       |

Exits

Writing Intensive (3)

Capstone (3)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**OTHER REQUIREMENTS:**

FLEX

GR Comm. (Fr. Eng. +6)

GR Comp. (6: MGF or MAC)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Hours towards Bachelors:**

Have

\_\_\_\_\_

Major

\_\_\_\_\_

FKL

\_\_\_\_\_

FL

\_\_\_\_\_

GR

\_\_\_\_\_

Upper

\_\_\_\_\_

Outside

\_\_\_\_\_

**Total**

\_\_\_\_\_

Elec. (to 120)

\_\_\_\_\_

# CAS Quantitative Economics and Econometrics B.S. Degree Program

## *WHAT ARE THE REQUIREMENTS TO ENTER THE MAJOR?*

There are no requirements to enter the major. If you are enrolled at USF, you are eligible.

## *WHAT ARE THE REQUIREMENTS TO GRADUATE?*

In order to graduate you need:

- 120 total credit hours
- 42 or 48 credit hours in upper level courses number 3000 or higher, depending on catalog year. Please follow up with the academic advisor.
- to meet the FKL requirements
- to meet the Gordon Rule requirements
- to fulfill the foreign language requirement
- to meet all the major requirements
- to maintain a 2.0 GPA in your major, USF, and overall grades
- a minimum of nine hours of summer hours
- 12 credit hours of upper level 3000 or 4000 economics elective course work must be taken at USF Tampa
- 30 hours out of your last 60 hours must be taken at USF Tampa
- 80 hours outside the major

## *DO ALL MY GRADES HAVE TO BE A "C" AND ABOVE?*

### **Starting in Fall 2012:**

For students in the 2012-13 undergraduate catalog, you must obtain a grade of C- or higher in all courses required for the major or minor in Economics. In addition, a grade point average of a 2.0 or better must be maintained in major or minor coursework.

### **Students Prior to Fall 2012:**

You must earn a C- or better in Macro or Micro Principles, Intermediate Price Theory and any economics course that is a prerequisite to another course. In addition, you must maintain a 2.0 average for your major. If, for example, you have a D in one course, you must have a B in another course to balance it out.

### **Department of Economics D/F Policy:**

All students entering USF for the first time in Fall 2012 or later, who earn three D and/or F grades in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) will be required to change their major to a major more appropriate to their goals and

academic performance, and to a major that is not conferred by the Economics Department through the CAS.

All continuing students who entered USF prior to Fall 2012, who **have NOT earned any D or F grades** in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) by the beginning of Fall 2012, will also be allowed **three D and/or F grades** in those courses before being required to change their major to a major more appropriate to their goals and academic performance, and to a major that is not conferred by the Economics Department through the CAS.

All continuing students who entered USF prior to Fall 2012, who **HAVE earned one or more D or F grades** in any of the following courses at USF: ECO 2013, ECO 2023, ECO 3101, ECO 3203, STA 2023 (or QMB 2100), (QMB 3200, prior to Fall 2015) and ECO 2052 (or MAC 2233, MAC 2311 or equivalent) by the beginning of Fall 2012, will only be allowed **two more D and/or F grades** in those courses before being required to change their major to a major more appropriate to their goals and academic performance, and to a major that is not conferred by the Economics Department through the CAS.

Grade forgiveness will NOT apply to the mandated requirement of changing majors.

#### ***WHAT ARE THE UPPER LEVEL HOURS I NEED?***

Students prior to Fall 2015 will need to complete 48 credit hours that are numbered 3000 and 4000. When you complete your major and exit courses you will have earned 21 of those hours. The other 21 hours can be in any other area or department.

Students starting in Fall 2015 will need to complete 42 credit hours that are numbered 3000 and 4000. When you complete your major and exit courses you will have earned 15 of those hours. The other 15 hours can be in any other area or department.

#### ***WHAT ARE THE QUANTITATIVE ECONOMICS AND ECONOMETRICS B.S. MAJOR REQUIREMENTS?***

There are 33 credit hours of economics courses in the major. The 30 hours of required courses are Macro and Microeconomic Principles, Analytical Tools for Economists (or Calculus I), Introductory Statistics I, Intermediate Price Theory, Intermediate Macroeconomics, Introduction to Mathematical Economics, Introduction to Econometrics, and two of the following three courses: Advanced Price Theory, Advanced Macroeconomics Theory, Forecasting and Time Series Analysis. The other three hours are economics electives, which you may choose from among those offered in any semester. About six are offered each semester. The selection changes from semester to semester.



### ***WHO WILL BE MY ADVISOR?***

CAS Economics majors are advised by the department advisor located in room CMC 206B. Appointments can be made via the e-scheduler system.

USF Students: <http://eschedule.forest.usf.edu/login.aspx>

Non-USF Students: <http://eschedule.forest.usf.edu/nonstudentlogin.aspx>

### ***HOW OFTEN SHOULD I SEE THE ADVISOR?***

You should see the advisor every semester. The advisor will help you intentionally discuss the merits of an Economics major, and discuss options for future academic planning.

The advisor will help you balance your workload so that you don't take several difficult classes in the same semester or fail to satisfy the prerequisites for courses you need.

At the end of the advising session, the advisor will make a record of the economics courses you need and give you a copy for your use.

### ***HOW DO I APPLY TO GRADUATE?***

In the first two weeks of the semester in which you plan to graduate, complete the graduate application online through your student OASIS account. If you haven't had a graduation check completed, visit the advisor and do it now. Don't wait until the last minute. The advisor may not be available when you get around to it.

If you plan to participate in the commencement ceremony, please register at the commencement ceremony website: <http://usfweb2.usf.edu/commencement/index.asp> within the first two weeks of your respective graduation semester.

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Here is a worksheet for the CAS Quantitative Economics and Econometrics B.S. major. Use it and the list of requirements on the previous page to see if you have all the classes needed for graduation.

# CAS Quantitative Economics and Econometrics B.S. Degree List

Refer to USF Catalog for more detail.

Name \_\_\_\_\_ U # \_\_\_\_\_  
 USF GPA \_\_\_\_\_ Overall GPA \_\_\_\_\_

| <b>HOUR CONSTRAINTS:</b> | Have  | Need  |
|--------------------------|-------|-------|
| USF (30)                 | _____ | _____ |
| Upper level (48 or 42)   | _____ | _____ |
| Summer (9)               | _____ | _____ |
| Outside major (80)       | _____ | _____ |

| <b>MAJOR REQUIREMENTS (30)</b>     |       |       |
|------------------------------------|-------|-------|
| ECO 2013 Macro Principles          | _____ | _____ |
| ECO 2023 Micro Principles          | _____ | _____ |
| ECO 3101 Intermediate Price Theory | _____ | _____ |
| ECO 3203 Intermediate Macro        | _____ | _____ |
| STA 2023 Stat I                    | _____ | _____ |
| ECO 2052 Analytical Tools          | _____ | _____ |
| ECO 4401 Intro. to Math Economics  | _____ | _____ |
| ECO 4421 Intro. to Econometrics    | _____ | _____ |

Choose two of the following:

|  |       |       |
|--|-------|-------|
| ECO 4105 Adv. Price Theory                           | _____ | _____ |
| ECO 4421 Adv. Macro. Theory                          | _____ | _____ |
| ECO 4935 Special Topic:<br>Forecasting & Time Series | _____ | _____ |

| <b>MAJOR ELECTIVES (3)</b> |       |       |
|----------------------------|-------|-------|
| _____                      | _____ | _____ |

Major GPA \_\_\_\_\_  
 Major residency (12 UL Hours) \_\_\_\_\_

| <b>FKL REQUIREMENTS (42)</b>        |       |       |
|-------------------------------------|-------|-------|
| <b>General Education (36)</b>       |       |       |
| Engl. Comp. (6)                     | _____ | _____ |
| Quant. Methods (6)                  | _____ | _____ |
| Natural Science (Life/Physical) (6) | _____ | _____ |
| Social Science (6)                  | _____ | _____ |
| Humanities (6)                      | _____ | _____ |
| Fine Arts (3)                       | _____ | _____ |
| Hum. & Cult. Div. & Global (3)      | _____ | _____ |

HHCP (6 credits)

Exits

Writing Intensive (3)

\_\_\_\_\_

\_\_\_\_\_

Capstone (3)

\_\_\_\_\_

\_\_\_\_\_

**OTHER REQUIREMENTS:**

FLEX

\_\_\_\_\_

\_\_\_\_\_

GR Comm. (Fr. Eng. +6)

\_\_\_\_\_

\_\_\_\_\_

GR Comp. (6: MGF or MAC)

\_\_\_\_\_

\_\_\_\_\_

**Hours towards Bachelors:**

Have

\_\_\_\_\_

Major

\_\_\_\_\_

FKL

\_\_\_\_\_

FL

\_\_\_\_\_

GR

\_\_\_\_\_

Upper

\_\_\_\_\_

Outside

\_\_\_\_\_

**Total**

\_\_\_\_\_

Elec. (to 120)

\_\_\_\_\_

## Master of Arts Degree Program

The Economics Department at USF offers a Master of Arts (M.A.) degree through the CAS. Students are required to complete 30 hours of graduate credit with a minimum of 24 hours in economics. A full-time student may complete the program in a single calendar year, although most students take four semesters.

### Program Requirements

The M.A. in Economics is a terminal degree, designed to prepare students for entry into business, government, or further study in a Ph.D. program. In addition to the required courses listed below, we currently offer the following courses: Urban and Regional Economics, Economics of the Public Sector, Advanced Econometrics, Industrial Organization, Health Economics, Issues in Regulation and Antitrust, Economic Development, International Trade, Theory, and Labor Economics.

Students must satisfy all university requirements for the Master's degree. In addition, the department requires students to complete 30 hours of graduate credit selected with the approval of the Graduate Advisor of the department. At least 24 hours must be in economics and must include:

- ECO 6115 Microeconomics I (3)
- ECO 6206 Macroeconomics I (3)
- ECO 6405 Mathematical Economics I (3)
- ECO 6424 Econometrics I (3)

Students must achieve a minimum 3.0 GPA in these four courses and an overall 3.0 GPA. Prior to clearance for the degree, each candidate must perform satisfactorily in an oral examination.

For more information, contact the M.A. Program Director, Dr. Michael Loewy, at (813) 974-6532 or send an email to [econma@usf.edu](mailto:econma@usf.edu).

### Graduate Employment Information

In 2012, economics ranked fourth among 34 occupations (with a Master's degree) and had an average starting salary of \$75,000<sup>6</sup>. Locally, placement of USF graduates in the private sector includes Urban Economics, Jabil Circuit, Price-Waterhouse Coopers, TECO, AT&T, Raymond James, Sun Trust Bank, Real Estate Research Consultants, Mitsubishi Power Systems, Credit Suisse Group, Revenue Management Solutions, Baker Leisure Group, and Tindale-Oliver Associates. These jobs generally involve data analysis and forecasting.

Graduates have obtained employment in all levels of government: Specifically, USF Center for Urban Transportation Research, State of Florida Office of the Comptroller, Metropolitan Planning Organization, U.S. Bureau of Labor Statistics, U.S. Department of State, U.S. Department of Commerce, SWFRPO, Department of Defense, and the County Planning Commissions of Hillsborough, Pinellas and Pasco counties.

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<sup>6</sup> [www.bls.gov/ooh](http://www.bls.gov/ooh)

Lastly, many students stay in academia, either by pursuing a Ph.D. in Economics or teaching at the community college level. At local community colleges<sup>7</sup>, starting salaries for new instructors range from \$43,000 to \$58,000. For students interested in pursuing a Ph.D., the objective is to provide the background needed to obtain admission to a high-quality Ph.D. program, and once there, to compete successfully. Emphasis is placed on providing the technical and analytical skills required in doctoral work. USF graduates have gone to high-quality Ph.D. programs, including those at the University of Texas, Austin, Texas A&M University, University of California, Irvine, University of Illinois, Vanderbilt University, Johns Hopkins University, University of Florida, University of Virginia, Florida State University, and University of Wisconsin-Milwaukee.

### **Admission and Financial Aid**

Applicants should have a Bachelor's degree and a strong undergraduate record. A major in economics with a strong quantitative background is preferable. However, arrangements can be made that permit a candidate with minimal background in economics to pursue the degree. Applicants must submit scores from the Graduate Record Examination (GRE). Applications should be submitted by the deadlines provided in the graduate catalog. Applicants are judged on their test scores and undergraduates records.

At USF, financial aid in the form of teaching assistantships is available to full-time students. For the 2014-2015 year, these assistantships provided a student approximately \$10,000 and partial tuition waivers.

As the above discussion indicates, our recent graduates have done quite well in the job market. When one considers the higher salaries obtainable with a Master's degree, the investment of resources necessary to obtain a Master's degree has a high rate of return.

## **Ph.D. Degree Program**

The Ph.D. program in Economics at USF offers a challenging environment for personal intellectual development. The program prepares students for teaching and research in universities and for policy analyst positions in business or government. The program draws advantage from strong faculty research involvement and USF's urban location. For more information, contact the Ph.D. Program Director, Dr. Andrei Barbos, at 974-6514 or send an email to [abarbos@usf.edu](mailto:abarbos@usf.edu).

## **Course Offerings**

The Economics Department offers a wide array of courses for our undergraduate majors and minors, which are described as follows. Copies of the course syllabi for these courses are available in the Economics Department located in room CMC 206. While the course descriptions in this handbook and in the course syllabi are intended to help you choose interesting electives, the actual content and structure of the courses may vary somewhat from the description given below.

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<sup>7</sup> Community College (Central Fla.) Salaries

## CASB = Social and Behavioral Sciences

### **ECO 1000 – Basic Economics (CASB)**

The primary purpose of this course is to provide an introduction to basic economic principles and problems. The course includes an introduction to microeconomics and macroeconomics, alternative political economic perspectives, and the application of economic analysis to contemporary social issues. The course has been designed to meet the needs of students seeking to fulfill the social science requirements of the new liberal arts curriculum. Significant dimensions of liberal arts education, including international and environmental issues, race, gender, ethnicity, values, and ethics are included. Critical thinking is encouraged through development of the tools of economics and recognition of controversy in economics. (No credit after completing either Macro or Micro Principles.)

### **ECO 2013 – Macroeconomic Principles (CASB)**

Macroeconomics studies the economy as a whole. In particular, it studies the determination of the overall level of economic activity, of unemployment, aggregate income, average prices, and inflation. Among the topics discussed are the objectives of full employment, price stability, economic growth, and the balance of payments. Emphasis is given to the applications of fiscal and monetary policy.

### **ECO 2023 – Microeconomic Principles**

Microeconomics deals with the fundamental economic concept of scarcity and the problem of choice. In this course, the student will explore how a society answers the economic questions of what to produce, how to produce, and to whom the outcome will be distributed. Economic decision making of the individual household and the firm will be studied. Attention is focused on factors affecting consumers' wants, the determination of prices, the optimum output in markets, and how resources are allocated.

### **ECO 3101 – Intermediate Price Theory (Prerequisites ECO 2023 and ECO 2052, or MAC 2233 or MAC 2311)**

Intermediate Price Theory builds upon the principles developed in Microeconomic Principles. Starting with a review of supply and demand, the course includes demand theory, production and cost theory, market structure analysis, and input markets. (No credit after completing ECP 3703.)

### **ECO 3203 – Intermediate Macroeconomics (Prerequisites ECO 2013 and ECO 3101 and ECO 2052, or ECO 3101 or MAC 2233 or MAC 2311)**

Topics covered include the determination of output, employment, inflation, and interest rates in both the long-run (growth theory) and the short-run (business cycle theory). The roles of monetary and fiscal policy in these processes are also considered. Open economy models and models incorporating aggregate uncertainty may be considered as well.

### **ECO 3622 – American Economic History (Prerequisites ECO 2013 and ECO 2023)**

This course provides an introduction to the economic history of the United States from colonial times to the present. The course applies basic economic analysis and reasoning to discuss the evolution of the American economy. Particular attention is paid to how economic concepts such as opportunity costs, comparative advantage, and supply and demand explain much of our nation's history as well as how they have led to the development of our nation's economic institutions and policies.

### **ECO 3703 – International Economics (Prerequisites ECO 2013 and ECO 2023)**

The study of international economics is traditionally divided into two categories: the *“real”* side and the *“monetary”* side.

Analysis of the real side focuses on real factors related to trade in goods and services. We first analyze what determines which goods will be exported or imported by a given country and under what circumstances a country's citizens will be made better or worse off by trade. We also analyze the impact of trade on the major factors of production (land, labor, and capital), and the effects of tariffs and other distortions. Finally, we examine the impact of economic growth on international trade and social welfare.

Analysis of the monetary side starts from the fact that trade in financial assets has become equally as important as trade in goods and services. Furthermore, most trade is paid for with money and not through barter. Thus the values of a country's exports and imports are seldom equal, leaving a balance that must be financed through a flow of financial capital. Alternatively, we may view financial flows as creating imbalances that must be matched by flows of goods and services. Such imbalances in the *“balance of payments”* cause adjustments in a country's exchange rate, employment level, or inflation rate. Likewise, the impacts of a country's monetary and fiscal policies are interrelated with its balance of payments and exchange rate. These relationships help us to analyze whether exchange rates should remain flexible as they have been since the 70's or fixed as in the 50's and 60's.

### **ECO 4105 – Advanced Price Theory (Prerequisite ECO 3101 with a grade of B or better)**

Advanced Price Theory builds on the base provided by our traditional price theory course. It begins by exploring in greater depth the tools of consumer behavior and of competitive and monopoly markets. It goes on to explore the advanced concepts of intertemporal choice, uncertainty and its implications for capital markets, labor markets, game theory, general equilibrium, welfare, externalities, and public goods.

### **ECO 4201 – Advanced Macroeconomic Theory (Prerequisite ECO 3203 with a grade of B or better)**

Advanced Macroeconomic Theory offers students an opportunity to go beyond the general introduction to macroeconomic theory found in Intermediate Macroeconomics and to study in-depth a selected topic within macroeconomics, namely monetary theory. Monetary theory uses tools

from economic theory such as utility maximization and market clearing to study issues in which money and other assets play a key role. In particular, in this class we consider questions such as:

- Why is paper money held when there exist other assets that offer a higher return?
- How does inflation alter the amounts of currency and other assets that people choose to hold?
- How do banks provide liquidity and how this is connected to the possibility of bank runs?
- What is the role of central banks in providing a means of payment and can such a means of payment be privately provided?
- Under what conditions can or cannot government budget deficits be financed indefinitely and what, if any, implications does this have for the crowding out of physical capital?

### **ECO 4270 – Economic Growth** (Prerequisite ECO 3101)

This course provides an introduction to the theory of economic growth that is the process whereby the level of real output per capita increases over time. Growth is shown to be the result of factor accumulation, productivity growth, and the underlying determinants that lead to differences in each of these proximate determinants of income variation.

### **ECO 4303 – History of Economic Thought** (Prerequisites ECO 2013 and ECO 2023)

The primary purpose of this course is to develop for undergraduate Economics majors and minors an understanding of the history of the development of economic theory. The time span covered goes from the beginnings of systematic economic thought in the 14<sup>th</sup> century to and including the 20<sup>th</sup> century. A secondary purpose of this course is to develop in students an appreciation of the influences of the social, political and economic environments on the development of economics.

### **ECO 4323 – Radical Political Economy** (Prerequisite ECO 1000 or ECO 2013 or ECO 2023, or consent of instructor)

This course presents an analysis of contemporary capitalist and socialist system from the perspective of the Marxian tradition in economics. The primary focus is the functioning of advanced capitalist systems, particularly the U.S. economy. What is the contribution of Marxist political economy to our understanding of the functioning of modern capitalism? What are capitalism's laws of motion and what are the more important elements of the structure of advanced capitalism?

This course begins with an examination of the Marxian views of historical change along with theories of value, class, and capital accumulation. The industrial structure of advanced capitalism, the functioning of its labor markets, and the Marxist theory of government activity are studied, followed by an examination of the determination of production, income, and employment.

Given this perspective of the functioning of advanced capitalism, the course turns to the analysis of social problems including inequality and poverty, discrimination, alienation, unemployment, and others. The remainder of the course is devoted to an examination of the political economy of socialism.



### **ECO 4400 – Game Theory** (Prerequisites ECO 2013 and ECO 2023)

This course is an introduction to *game theory*, the study of strategic behavior among parties having opposed, mixed or similar interests. Major course topics will include the following:

- Strict and weak dominance
- Nash equilibrium
- Mixed strategies
- Backward induction
- Subgame perfect Nash equilibrium
- Repeated games
- Moral hazard
- Adverse selection

### **ECO 4401 – Introduction to Mathematical Economics** (Prerequisites ECO 2013 and ECO 2023 and ECO 2052, or Calculus equivalent, i.e. MAC 2241 or MAC 2233 or C1)

This course provides an introductory, although rigorous, exposition of modern economic analysis using the tools of mathematics. We begin by using algebra to determine the equilibrium price and quantity in markets. A mathematical approach to the macroeconomic determination of national income is also discussed. The tools of matrix algebra are developed to provide an alternative procedure for solving systems of equations.

Following this analysis, basic differential calculus skills are developed to allow us to formally determine the effects of an equilibrium from changes in exogenous variables. For example, questions such as what happens to equilibrium price and quantity when consumer income changes or what happens to the equilibrium level of national income if the money supply is changed will be discussed.

After developing additional calculus techniques, the last section of the course analyzes the behavior of firms and consumers. Topics include profit-maximizing input and output decisions by firms as well as utility-maximizing decisions by consumers.

It is assumed that the students have an understanding of high-school-level algebra. Although all other mathematical techniques will be developed during the course, previous exposure to calculus would be beneficial. In addition, an understanding of the principles of economics is essential, and the student should have already taken, or be currently enrolled in Intermediate Price Theory.

### **ECO 4421 – Introduction to Econometrics** (Prerequisites ECO 3101 and STA 2023, or OMB 3200 with a grade of B or better)

This is an introductory course in econometrics that will prepare you for more advanced economic courses. Econometrics is based upon the development of statistical methods for estimating economic relationships, testing economic theories, and evaluating and implementing government and business policy. Regression analysis employed to estimate consumption, returns on different investment strategies, demand, cost, and production functions, effectiveness of publicly funded programs, forecast important macroeconomic variables as interest rates, inflation rates and GDP.

This course examines problems of autocorrelation, heteroscedasticity, multicollinearity, and specification errors.

#### **ECO 4504 – Public Finance (Prerequisite ECO 3101)**

With an ever increasing fraction (now nearly 40%) of the nation's resources being allocated by local, state, and federal governments, an understanding of the operation of the public sector is the dominant theme in modern economic study. This course uses the foundation built in Intermediate Price Theory to explore the rationale for government and the consequences of its taxing and spending policies. An underlying theme of Public Finance is the collective choice mechanism that guides public sector decision-making in a democratic society. Termed "*Public Choice*," this sub-discipline of Public Finance was recently honored by the awarding of the Nobel Prize in Economics to its founding father, James Buchanan.

The course unfolds as follows. First, the model of perfect competition is analyzed to reveal real-world shortcomings. Barriers to entry, imperfect information, and externalities lead to inefficient allocations of resources. For some goods, like national defense, the inability of a producer to limit consumption to those who pay may entirely preclude private market provision of the good. There is some reason to suspect that collective action is needed to correct these "*market failures*."

Second, models of collective decision-making are introduced to aid in the assessment of the demand for public sector activity. These models explain the use of various decision rules, voter apathy, and the predominance of special interest legislation.

Finally, the specific programs of government taxation and expenditure are studied. Because all taxes are linked to some economic activity, the general principle that taxes cost the private sector more than they raise in tax dollars is a consistent theme in this section of the course. Tax expenditures and direct government expenditures create the same losses; the private sector return is valued less than the public sector expenditure. The student of Public Finance learns to count these "*deadweight*" losses as a cost of public sector output.

#### **ECO 4704 – International Trade and Policy (Prerequisite ECO 3101 with a grade of C- or better)**

This course deals exclusively with the Micro side of International Economics. We will examine trade patterns based on comparative advantage, as well as those related to imperfect competition and differences in cost of production that lead to offshoring. We also examine trade policy – the ways in which countries can create obstacles to or facilitate free trade – in both perfectly and imperfectly competitive settings. We will discuss regional trading arrangements and international agreements.

#### **ECO 4713 – International Macroeconomics (Prerequisite ECO 3101)**

International Macroeconomics focuses on the financial side of international economics to the exclusion of the real side that is covered extensively in ECO 3703. The course begins by considering how international transactions are measured in the national accounts. In particular, we study the determination of nominal and real exchange rates in the short run and in the long run. The second half of the course concentrates more on the policy implications of the theory. We first

consider the chronology of international monetary arrangements starting with the gold standard of the late 19th Century, continuing to the fixed exchange rate regime of the Bretton Woods System, what lead to the break of Bretton Woods, and more recently, the move towards floating exchange rates among most nations of the world. We conclude by studying the causes of recent currency crises in Latin America and Asia as well as the operation and efficacy of currency unions such as is not in place in much of Western Europe.

**ECP 3125 – Economics of Income, Poverty and Discrimination** (Prerequisite ECO 1000 or ECO 2013 or ECO 2023)

This course examines the economic dimensions of income inequality, poverty and discrimination. The course begins with a review of the tools of economic analysis that are most useful in these areas of economics. The economic functions of government are discussed. Variations in economic analysis of markets and government across the political economic spectrum are examined. The main body of the course then focuses on economic facts, theories and public policies concerning income inequality, poverty and discrimination.

**ECP 3201 – The Economics of Women and Work** (Prerequisites ECO 1000 or ECO 2013 and ECO 2023)

This course is designed to acquaint students with the findings of research on women, men, and work in the labor market and the household. After being introduced to basic concepts of labor economics, students then consider some historical perspectives about women's roles and various states of economic development, as well as some anthropological insights.

The family is studied as an economic unit, looking at division of labor in the household and in the marketplace both from the neoclassical perspective and from other points of view.

Examination of gender differences in occupations and earnings occupies a major focus of the course. The human capital model is used for analysis, as well as various models of discrimination. Policy issues such as equal employment opportunity are examined in this context.

Finally, students study changing work roles and the family, and gender differences in other countries. Students are required to write a research paper and make a presentation based on their research.

This is not a course for the faint of heart but provides an excellent opportunity for students to explore further the richness of economic theory and its applications. This course is highly complementary to Labor Economics (ECP 3203).

**ECP 3203 – Labor Economics** (Prerequisite ECO 3101)

This course examines the manner in which the laws of demand and supply apply to labor markets. The focus is on the explanation of factors that determine the overall level of wages and employment, as well as factors that explain the relationship between education and earnings. The course also considers factors that explain differences in wages across occupations, industries and demographic groups in the U.S. Also examined are the effects on labor markets of monopoly and

monopsony, racial and sex discrimination, and collective bargaining. Government regulations of labor markets, such as minimum wage laws, anti-discrimination legislation, and occupational safety and health regulation, are also considered. Both theoretical and empirical evidence is considered on the questions of whether such regulations are justified and whether they achieve their desired affects.

This course is highly complementary to several other courses in economics such as The Economics of Women and Work (ECP 3201), and Law and Economics (ECP 4451).

### **ECP 3302 – Environmental Economics (Prerequisite ECO 2023)**

The objective of Environmental Economics is to provide the economic foundation and basic skills necessary to analyze natural resource and environmental policy alternatives. Natural resource economics deals with human use of nature as an input into production and consumption. Environmental economics addresses the problems that arise from disposal of the residuals from human production and consumption. An understanding of both will help the student grasp the problems policy makers face as they try to decide how to best serve both current and future generations.

The lectures emphasize the theoretical aspects of environmental and resource economics. Throughout the semester the material builds on the economic theory offered in the first part of the course. Once we have reviewed the appropriate economic theory we tackle the problem of determining the efficient allocation of depletable and renewable resources over time. Efficient allocation of resources is the backbone of what economist refers to as natural resource economics. Lectures then focus on the problem of pollution and environmental degradation. It is important to understand both the costs and the benefits of pollution before determining what level of pollution best serves society.

### **ECP 3403 – Industrial Organization (Prerequisite ECO 3101)**

This is an introductory course in industrial organization. The theory of industrial organization studies the market structure and behavior of firms when the standard assumption of perfect competition in the market is violated. The course analyzes the existence of market power, how firms create and maintain it, the implications of market power and related public policy issues.

### **ECP 3413 – Economics of Regulation and Anti-Trust (Prerequisites ECO 2013 and ECO 2023)**

Government regulates the activities of business enterprises in a wide variety of ways. This course looks at when and why free markets might fail to produce optimal performance. Over the last 30 years, government has imposed itself on free enterprise by regulating price, output, product quality, production technique, entry, profitability, and employment of resources. How successful has government regulation been? When is government regulation appropriate? When is it not? If regulation is needed, what method of regulation is best?

The course examines U.S. antitrust laws to see how the Justice Department and the Federal Trade Commission police markets to try to make and keep them competitive. The course shows how antitrust laws treat monopolization, mergers, and various pricing practices. The course also

examines direct economic regulation of specific industries such as telecommunications, energy, airlines, and trucking. Did deregulation raise or lower airfares? Did the break-up of AT&T improve consumer welfare? Do we need to restrict consumption of OPEC crude oil to protect ourselves against another embargo? We will also look at so-called "*social regulation*" which seeks to improve product quality, safety in the workplace, and the environment.

The course tackles these interesting questions by applying the principles of microeconomic theory. While this course does not require Intermediate Price Theory (ECO 3101), it nevertheless places a heavy emphasis on graphical analysis. No calculus is needed.

### **ECP 3530 – Economics of Health (Prerequisite ECO 3101)**

Students will acquire knowledge of the existing system of medical care in the U.S. and of the benefits of analyzing health care issues and policies with microeconomic concepts. The behavior and motivations of consumers and providers of medical care, access, equity, efficiency, and cost-control and price-setting issues are analyzed. International comparisons are made.

### **ECP 3613 – Urban Economics (Prerequisite ECO 3101)**

The primary purpose of this course is to use economic analysis to explain why cities exist, where they develop, how they grow, and how different activities are arranged within cities. It also explores economics of urban problems such as poverty, inadequate housing, racial segregation, congestion, pollution and crime. All of the economic concepts used in this course are covered in the typical Intermediate Microeconomic course, so students who have completed such a course will be able to move through the course at a rapid pace.

### **ECP 3623 – Regional Economics (Prerequisite ECO 3101)**

In this course, we ask and answer the following questions:

- What determines the location of firms relative to their input and output markets?
- Why do some firms locate near other firms in the same industry, for example, the new and used car lots along Florida Avenue in north Tampa and along US 19 in Pinellas County?
- Why do some firms locate away from other firms in the same industry by establishing market areas in which they are the dominant firm, for example, barber shops and beauty parlors?
- Why do we observe a regular gradation of urban areas from the largest one to many very small ones, measured in terms of population, spatial size, and the number of goods and services provided?
- What determines the spatial structure of urban areas, in terms of population and employment density, housing price, and land values?
- What determines the level of regional economic activity, and what factors cause the level of economic activity to rise or fall?
- What is economic impact analysis, and what are its strengths and weaknesses?
- What determines interregional migration?

- Why do some regions seem to remain economically depressed, such as Appalachia and southern Italy?
- What economic policies are best able to improve depressed regions?

### **ECP 4006 – Economics of Sports (Prerequisite ECO 3101)**

The Economics of Sports is an upper level undergraduate course for students pursuing an Economics major or minor. Prerequisites include Principles of Microeconomics (ECO 2023), Principles of Macroeconomics (ECO 2013), and Intermediate Price Theory (ECO 3101). No particular knowledge of sports is required.

It should be emphasized that this is an economics course, not a course in sports. Sports simply provide the metaphor for teaching and emphasizing economic concepts. For example, professional sport leagues act like a monopolist when they restrict the number of teams, and like a monopsonist when they hire athletes. If you are not interested in economics, no amount of interest in sports will substitute.

Topics covered in the course include:

- Monopoly and antitrust
- Stadium finance
- Economic benefits to the host community
- Competitive balance
- Labor relations
- Discrimination
- Amateur sports and the NCAA

### **ECP 4451 – Law and Economics (Prerequisites ECO 2013 and ECO 2023)**

Perhaps the most important development in legal thought in the last quarter century has been the application of economic principles to an ever-increasing range of legal fields, including not only the traditional fields of property law and market regulation, but also tort, criminal, contract, and constitutional law and legal procedures. Promoted by U.S. Court of Appeals Judge and University of Chicago Law School Professor Richard A. Posner, Law and Economics is now a required course at many law schools. Law and Economics draws on the lessons of Intermediate Price Theory to provide a framework for analysis to the law. Law is viewed, not as a collection of rules, but as a set of constraints, purposefully imposed and enforced so as to achieve a specific goal. Understanding the goal makes remembering the rules much easier. Understanding microeconomics makes evaluating goal-oriented rules easier.

For example, if the goal is to reduce the property theft associated with financing a drug dependency, should we increase the penalties for drug trafficking and supply and increase our efforts to secure our borders? This will decrease the supply and quantity demanded of drugs but, if demand is inelastic, the higher price will result in a greater expenditure with an associated increase in property theft. Will rules that prohibit lenders from garnisheeing the wages and seizing the homesteads of borrowers that default make borrowers better off? Not if the additional constraint imposes a greater cost on the lender than the benefit it conveys to the borrower. The same is true

of rules that require landlords to meet minimum housing standards or automobile companies to provide seatbelts. Like the incidence of a tax, the cost of any constraint is shared, through price adjustments, with others.

An understanding of the law is not a prerequisite of the course. An interest in the law, its application, and its policy consequences is. The course is equally divided between an examination of the law of torts, property, contracts, and crime with an eye towards understanding the pattern of the law and a study of specific applications of legal constraints and the consequent reallocation of resources.

#### **ECP 4505 – Economics of Crime** (Prerequisites ECO 2013 and ECO 2023)

This course uses economic theory and methods to analyze the determinants of criminal behavior, the efficient allocation of resources to fight crime, and the justice system. It analyzes questions such as why the optimal crime rate in society is not zero, how resources are to be allocated to fight different crimes, as well as among various components of the criminal justice system, what is an efficient punishment, why is crime increasing as society *“gets tough”* on the criminal? The emphasis in this course is on both theoretical and empirical analysis to the economic approach to crime.

#### **ECP 4510 – Economics of Education** (Prerequisites ECO 3101 or ECO 2013 and ECO 2023 with a grade of B or better)

This course will use economic theory, empirical analysis and policy literature to examine current issues in U.S. education. Some of the topics we will cover include an analysis of how people choose their investments in education (human capital theory); how to empirically distinguish the return to education from the return to natural ability; how education policy affects a country's economic growth; how education and earnings are related in a single person's lifetime, and how and why this relationship has changed in the last few decades; the role of early childhood education; the various approaches to primary and secondary school reform (e.g., charter schools, vouchers, teacher evaluation etc.); and the problem of increasing access to higher education. Time permitting, we will also discuss related topics which are wider in scope such as how has the recent technological revolution affected the education system, and what role does education play in the increase in U.S. wage inequality over the last few decades, and the role of education in individual mobility.

#### **ECP 4704 – Economics of Business Strategy** (Prerequisite ECO 3101)

This course studies strategies that businesses can and do employ to generate long-term profits. Business strategy is based on foundations of microeconomics and game theory. Topic coverage includes strategic analysis of horizontal and vertical boundaries of business firms, strategic diversification, strategic pricing decisions, strategic entry deterrence, and Michael Porter's Five Forces analysis of industry competition.

#### **ECS 3013 – Economic Development** (Prerequisites ECO 2013 and ECO 2023)

Why do living standards differ so much across countries? What explains the differences in income distribution across countries and through time?

What is the relationship between political stability, political freedoms, and economic development? Does the international economy affect the prospects of growth and development in contemporary Less Developed Countries (LDCs)? Is there a *"magic bullet"* that can propel LDCs to prosperity and higher living standards? This course uses principles of economics to analyze the development problems of contemporary LDCs and it tries to answer some of the questions above. Topics discussed include approaches to development, determinants of growth, human development, income distribution, international economic relations, government policy, sustained development, and interactions between political institutions, economic policy, and economic development. The geographical coverage includes the LDCs of Africa, Asia, and South and Central America.

### **ECS 4003 – Comparative Economic Systems (Prerequisite ECO 1000 or ECO 2013 or ECO 2023)**

Comparative Economic Systems includes both a comparative analysis of capitalist and socialist economic systems and a comparison of alternative perspectives in political economy. The course opens with a discussion of the rapid change occurring in economic systems around the world.

Alternative views of the role of markets and governments in the functioning of economic systems are then examined in detail. Definitions, classification schemes, and criteria for valuation of economic systems are explored next.

The course then turns to the evaluation of the theory and practice of capitalism. After reviewing theoretical expectations concerning capitalism, the recent experience of advanced capitalism in the U.S. and other countries is studied. The experience of the *"so-called"* socialist economies of the Soviet Union, Eastern Europe, and China are studied along with the on-going dramatic transformations of those economies.

### **ECS 4430 – Economics of Latin America (Prerequisites ECO 1000 or ECO 2013 and ECO 2023)**

This course is an introduction to the study of Latin American economic development and the corresponding social, political and cultural background.

## **Faculty**

### **BARBOS, Andrei – Associate Professor, Ph.D. Program Director**

Andrei Barbos was born in a city from the region of Transylvania in Romania. He received his B.A. from the Academy of Economic Studies in Bucharest, Romania, and his Ph.D. from Northwestern University in Evanston, Illinois in June 2009.

RESEARCH INTEREST: Microeconomic Theory

COURSE TAUGHT: Graduate Mathematical Economics

PERSONAL: Professor Barbos likes hiking in the mountains when that's possible and watching the Chicago Bears when they are winning.



### **BARTLETT, Sue – Senior Instructor**

Sue Bartlett was born in Detroit, MI, but considers herself *"pretty much a Floridian."* She has lived here since 1965. She received both her B.S. in General Business in 1991 and her M.A. in Economics in 1993 at USF.

Following her M.A. degree, she worked at the Center for Economic and Management Research at USF and taught here and at St. Petersburg Jr. College as an Adjunct Professor. She has been teaching on the Tampa Campus full-time since August, 1994.

COURSES TAUGHT: Basic Economics, Principles of Micro and Macroeconomics, Managerial Economics, and Price Theory

PERSONAL: Ms. Bartlett spends her spare time gardening, canoeing and playing guitar.

### **CRISS, Antoinette (Toni) – Senior Instructor**

Toni Criss is originally from Brockton, MA. She has a BS in Resource Economics from the University of Vermont (1982), an MS in Natural Resource Economics from Colorado State University (1984), and a Ph.D. in Economics from the University of New Hampshire (1993).

She was an International Trade Analyst at the US International Trade Commission in Washington, DC from 1985-89. She taught at Randolph-Macon Woman's College (now Randolph College) in Lynchburg, VA from 1993-97, Foothill College in Los Altos Hills, CA from 1997-99, and USF St. Petersburg from 2000-10, before coming to USF Tampa in 2010. She is the Undergraduate Program Coordinator for the Economics Department.

COURSES TAUGHT: Macro Principles, Environmental Economics, International Economics, International Trade and Policy

PERSONAL: Dr. Criss has a dog, and enjoys football, hockey, and baseball as a spectator. Her husband teaches Physics at USF and does all the cooking, so she has specialized in mixology.

### **DeSALVO, Joseph – Professor**

Joe DeSalvo is from Jacksonville, FL, and received a B.A. in 1960 and an M.A. in 1961, both in economics, from the University of Florida. His 1968 Ph.D. is from Northwestern University.

Professor DeSalvo came to USF in 1983. He served as director of the Center for Economic and Management Research from 1984 to 1989 and as Department Chair from 1998 to 2003. He taught at The Virginia Military Institute and the University of Wisconsin (Milwaukee), where he served as Department Chair; was a Visiting Research Professor at Facultés Universitaires Catholiques de Mons (Belgium); and worked for the Rand Corporation.

RESEARCH INTERESTS: Urban and Regional Economics

COURSES TAUGHT: Microeconomics (principles, intermediate, and graduate), Macroeconomics (principles, intermediate, and Masters of Accountancy), Managerial Economics (undergraduate and MBA), Economic Policy Analysis (graduate), Welfare Economics (undergraduate/graduate), Industrial Organization (undergraduate), Urban Economics (undergraduate and graduate), Urban Public Finance (undergraduate and graduate), Regional Economics (undergraduate and graduate)

PERSONAL: Professor DeSalvo enjoys listening to jazz, playing ragtime piano, weight-lifting, and jogging.

**JIN, Xin – Assistant Professor**

Xin Jin joined USF in 2014. She has a Ph.D. in Economics from Cornell University. Dr. Jin's research focuses on labor economics.

COURSES TAUGHT: Introduction to Econometrics, Microeconomics for MBAs

**KAMP, Bradley – Associate Professor and Chair**

Brad Kamp is from Alton, IL. He earned a B.A. in Economics at the University of Illinois in 1985, and an M.A. (1989) and Ph.D. (1993) at the University of California, San Diego.

RESEARCH INTERESTS: Industrial Organization and the Economics of Imperfect Information

COURSES TAUGHT: Micro Principles, Intermediate Price Theory, Graduate Microeconomics, and Advanced Price Theory

PERSONAL: Professor Kamp enjoys playing golf and softball.

**LA MATTINA, GIULIA – Assistant Professor**

Giulia La Mattina is originally from La Spezia, Italy. She has a B.S. and a M.S. degree in Economics from Bocconi University in Milan, and she received her Ph.D. in Economics from Boston University in 2013.

COURSES TAUGHT: Labor Economics, Development Economics

PERSONAL: Professor La Mattina enjoys spending time with her family.

**LIU, HAIYAN – Assistant Professor**

Haiyan Liu is originally from Chengdu, China. She received her B.S. in Economics of International Trade from Renmin University (2003), her M.A. in Health Economics from Peking University (2006) and her Ph.D. in Economics from University of Virginia (2014). She has been teaching at USF Tampa full-time since August, 2014.

RESEARCH INTEREST: Empirical industrial organization, health economics and applied microeconomics

**COURSES TAUGHT:** Industrial Organization (undergraduate and graduate levels), Economic Concepts

**PERSONAL:** Dr. Liu loves to spend time with her family and she also enjoys running, swimming, yoga and watching movies in her spare time.

**LOEWY, Michael – Associate Professor, M.A. Program Director**

Michael Loewy was born in Los Angeles. He received his B.A. in Economics from the University of California, San Diego in 1979. He earned his Ph.D. in Economics from the University of Minnesota, Twin Cities in 1986. He joined USF in 1998 after previously having been on the faculties of The George Washington University and the University of Houston. Michael also spent a year visiting Iowa State University.

**RESEARCH INTERESTS:** Monetary Economics, Economic Growth, Dynamic Macroeconomic Theory

**COURSES TAUGHT:** Macroeconomics (principles, intermediate, Master and Ph.D. levels), Monetary Theory (undergraduate and graduate levels), International Macroeconomics (undergraduate level), Economic Growth (undergraduate level), and American Economic History (undergraduate level)

**PERSONAL:** Professor Loewy enjoys bicycling with his family and is an avid hockey fan.

**MARTINEZ, Erika – Instructor**

Erika Martinez is an Instructor in the Economics Department at USF. She earned her Ph.D. and Master's degrees in Economics from Duke University in 2011 and 2007, respectively, and her Bachelor's degree from the University of Florida in 2004. Before coming to USF she held teaching positions at Duke University and Elon University.

**RESEARCH INTERESTS:** Professor Martinez conducts research on various educational issues from school accountability and standards to early childhood development. Her current research projects involve conducting a large-scale study of school accountability implications in North Carolina, using state-wide data on public schools and the housing market; and following children from grade K-2 through their school career to evaluate early childhood programs through the American Association for Gifted Children at Duke University. She is also a member of the American Economic Association and the National Economics Association.

**COURSES TAUGHT:** Principles of Microeconomics, Principles of Macroeconomics, Intermediate Price Theory, Advanced Microeconomic Theory, and Economics of Education.

**PERSONAL:** In her free time, Professor Martinez enjoys Latin dancing and playing sports; including wakeboarding, basketball, softball, football, and motorcycle riding.

### **MUNKIN, Murat – Associate Professor**

From the Kazakh Qipchaq tribe, born in Almaty, Kazakshtan, Murat K. Munkin finished at the Department of Mathematics and Mechanics of Moscow State University in 1993 and received his Ph.D. degree in Economics at Indiana University in 2001. Before coming to USF in 2007, he was an Assistant and then Associate Professor at the University of Tennessee at Knoxville.

**COURSES TAUGHT:** Intermediate Microeconomics, Health Economics, Introductory Statistics, Calculus, Graduate Courses in Econometrics and Health Economics

**PERSONAL:** Professor Munkin likes playing soccer, chess, and fishing.

### **PICONE, Gabriel A. – Professor**

Gabriel Picone was born in a very small town in Argentina and received his B.A. degree in Economics at Universidad de Cordoba. He earned a Ph.D. at Vanderbilt University in 1993. During the summer of 2005, Prof. Picone visited University of York (England).

**RESEARCH INTERESTS:** Health Economics, Applied Microeconomics, Econometrics

**COURSES TAUGHT:** Managerial Economics, Mathematical Economics, Intro to Econometrics, Econometrics I, II, and III, Health Economics I and II

**PERSONAL:** Professor Picone likes to spend time with his family. He also enjoys traveling, drinking real beers (especially in England) and watching Notre Dame football and Argentinean Soccer.

### **PORTER, Philip – Professor**

Phil Porter is originally from Ft. Lauderdale. He attended Auburn University where he received his B.S. in Economics in 1973 and his M.S. in 1976. He earned his Ph.D. at Texas A&M in 1978. Professor Porter came to USF in 1985 from Southern Methodist University in Dallas, Texas. He is the Director of the Center for Economic Policy Analysis.

**RESEARCH INTERESTS:** Public Finance/Public Choice, Law and Economics, and Sports Economics

**COURSES TAUGHT:** Basic Economics, Microeconomic Principles, Intermediate Price Theory, Public Finance (Graduate and Undergraduate), Law and Economics, Advanced Price Theory, Mathematical Economics (Graduate) and Economics of Sports

**PERSONAL:** Professor Porter is married with two daughters. He enjoys camping, fishing, boating, and biking and hiking in the mountains.

### **THOMAS, Christopher – Associate Professor**

Chris Thomas is a Texan. He was born in Houston and educated at Texas A&M where he received his B.S. and Ph.D. degrees in 1975 and 1980. After two years as an energy economist at Oak Ridge National Laboratory, he came to USF in 1982.

**RESEARCH INTERESTS:** Economics of Regulation and Antitrust, Managerial Economics, Economics of Business Strategy, and Sustainable Enterprise

**COURSES TAUGHT:** Issues in Regulation and Antitrust, Economics of Business Strategy, Principles of Microeconomics, Economics of Sustainable Enterprise, and Managerial Economics

**PERSONAL:** Professor Thomas enjoys tennis and photography.

### **WILDE, Joshua – Assistant Professor**

Joshua Wilde was born in Anchorage, Alaska and received his B.A. degree in Economics from Brigham Young University. He earned his Ph.D. from Brown University in 2011

**RESEARCH INTERESTS:** Growth, Macroeconomics, Demography

**COURSES TAUGHT:** Intermediate Macro

**PERSONAL:** Professor Wilde's favorite thing to do is spend time with his family. He enjoys swimming, biking, hiking, and camping, and volunteers with a local Boy Scout troop. In spite of loving everything to do with snow, he is still completely enamored with Florida because of their excellent beaches.

### **Emeritus Faculty**

- Bellante, Donald
- Ford, Edward
- Green, Carole
- Gyimah-Brempong, Kwabena
- Herander, Mark
- Herman, Walter
- Hodgson, John
- Rowe, John
- Shows, E. Warren

## Resources

For advising appointments:

USF Students: <http://eschedule.forest.usf.edu/login.aspx>

Non-USF Students: <http://eschedule.forest.usf.edu/nonstudentlogin.aspx>

USF Department of Economics website: <http://economics.usf.edu>

American Economic Association: <https://www.aeaweb.org>

## PART III: Graduate Study in Economics

### Preparing for Graduate School

Many career possibilities require graduate training. If you think you may need graduate work in economics for your chosen career, you should begin planning now. You might start by reading an article about the experiences of graduate students in economics by *David Colander and Arjo Klamer, "The Making of an Economist."* They report on a survey taken of graduate students enrolled in six top-ranking graduate programs in economics, covering their areas of interest, perceptions of how to succeed, and different views on policy issues and theoretical controversies at different institutions.

Graduate schools in economics currently award approximately 600 Ph.D. degrees, 1,500 Master's degrees, and 16,000 Bachelor's degrees<sup>8</sup> annually. There are over 100 graduate schools in the United States offering the Economics Ph.D. degree and a number of others offering only a Master's degree. Which ones would you like to attend? To which ones should you apply? What should you do as an undergraduate to prepare for graduate school and to increase the likelihood of being admitted to the schools of your choice?

#### Undergraduate Preparations

If you aspire to graduate study in economics (or if you are unsure but want to keep that possibility open), there are certain guidelines you should keep in mind when choosing your undergraduate courses.

#### Mathematics

Most graduate departments require a background in mathematics, including at least introductory calculus and statistics. Matrix algebra is also helpful. Some schools offer a course called Mathematical Economics, in which students learn mathematics in a context of economic applications. Some graduate departments allow you to make up deficiencies in mathematics after entrance, but you will be better prepared if you acquire some of the needed mathematics as an undergraduate.

#### Theory

Macro and Micro Theory are the basic foundations for graduate study. Your first graduate courses will probably be in Micro and Macro Theory, but the professor will assume a firm foundation in Basic Theory at both the introductory and intermediate levels. Economics is a science based on theory; there is no more important part of your undergraduate economics study than theory courses as preparation for graduate study.

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<sup>8</sup> Based on 77% of reporting universities in the American Economic Association UAQ Summary 2007.

## Grades

If you are to go on to graduate school, your undergraduate grades really matter. A minimum 3.0 GPA is essential. An upward-moving GPA as you progress through your undergraduate studies may indicate blooming promise. A GPA that falls as commencement approaches makes admission much less likely.

## Related Skills and Interests

Graduate study in economics is usually very specialized. Your area of specialization may depend in part on the kinds of courses you took other than in economics and the interests you developed in undergraduate school. Knowledge of a foreign language may be a major determinant of how you later use your economics. A working knowledge of Chinese, Russian, or Arabic may provide a highly marketable skill (for research, for government service or for work in a multinational corporation or other international entities). Likewise, an economist with a strong foundation in accounting, in law, or in politics has a combination of talents of unusual value. An economist who is skilled in communication — in listening and understanding, in writing and speaking — has one of the scarcest talents in the profession. With the expansion of knowledge and the consequent alienation of economics from the average citizen by reason of its use of a specialized vocabulary and language, the synthesizer or communicator of knowledge is becoming indispensable.

The foundations of all these skills (languages, related disciplines, communication skills) must be laid in undergraduate school. Indeed, your undergraduate education is likely to be more important than your graduate training for determining whether you become anything more than a technically competent economist. Give some thought to development of other skills and interests that expand or complement your skills as an economist.

## Selecting a Graduate School

### Determining Your Goals

Before trying to select a school, review and possibly revise your goals, for they should influence your choice of the right school for you. You may need a year of some other kind of experience between undergraduate and graduate work to help you define and reconsider those goals. A year of work, or an internship in business or government, can be invaluable.

What kinds of professional roles do you find appealing? You may have identified some aspect of economics that you would like to develop as a specialty. There may also be some particular personal skills that you already possess or hope to develop to a very high level of proficiency. For example, you may have a particular talent for the application of mathematical methods in economics; for teaching, clear writing, oral explanation, or argument; for interpreting economic ideas, synthesizing and clarifying professional and/or political issues. These interests and skills will help you to identify a field of specialization (shown in Table 2) and some possible career choices.



## Table 2: Fields of Specialization in Economics

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- Agricultural and Natural Resource Economics
- Business Economics
- Economic Development
- Economic Growth
- Economic History
- Economic Systems
- Environmental and Ecological Economics
- Financial Economics
- Health, Education and Welfare
- History of Economic Thought
- Industrial Organization
- International Economics
- Labor and Demographic Economics
- Law and Economics
- Macroeconomics and Monetary Economics
- Mathematical and Quantitative Methods
- Microeconomics
- Public Economics
- Urban, Rural, Regional, Real Estate, and Transportation Economics

### Constraints on Your Choice

Before looking at graduate schools, you need to identify what constraints are likely to limit or influence your choice. Here are several that may apply.

#### *Money*

Do you have the financial resources to attend school? In 2011-2012, the average price of attendance for a Master's degree was \$23,000 and \$28,300<sup>9</sup> for a Ph.D. If not, are you able and willing to work? What about fellowships, assistantships, loans, and so forth? Most graduate programs offer some form of financial assistance, but the fraction of costs that financial aid will cover is highly variable, and more difficult to obtain at the more prestigious institutions. Financial assistance will depend on your undergraduate record. Most Ph.D. programs offer advanced students the opportunity to teach undergraduate courses to enable them both to develop teaching skills and to earn an income.

#### *Status*

How important is the prestige of the institution from which you are to receive your degree in terms of your career opportunities? The status of the graduate school is more important for academic

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<sup>9</sup> [www.nces.ed.gov](http://www.nces.ed.gov), "Trends in Graduate Student Financing: Selected Years, 1995-96 to 2011-12."

positions than for business or government. In state and local government, it is often helpful to attend a school in the region in which you ultimately would like to work.

### *Your Academic Qualifications*

The most important qualifications are your undergraduate grades and courses. A minimum 3.0 GPA is required for almost any graduate program, and considerably higher in the more prestigious programs. The Graduate Record Examination (GRE) is often required; sometimes an excellent score on the GRE will make up for some deficiencies in your undergraduate record. The status of your undergraduate school and the quality of your references can also make a difference. You will be competing with graduates of other, perhaps better known, colleges and universities. Finally, while it is possible to be accepted for graduate work in economics with a background other than an undergraduate Economics degree, you should at least have had the essential training in mathematics and economic theory.

### *Geographic Location*

Are there important reasons — family or personal preferences — that would incline you to study in one part of the country as opposed to another? Where would you like to be employed upon graduation? Some graduate schools have a national reputation and hence, a national placement market. Others are regional; if you are interested in a particular geographic area, you may be better off going to school in that area, particularly for a career in business or state government.

### **Schools Offering the Economics Ph.D. Degree**

Table 3 presents a list of the top 10 universities offering a Ph.D. in Economics.<sup>10</sup> Table 4 provides a list of all U.S. schools offering a Ph.D. in Economics listed by geographic region.

## **Table 3: Top 10 Economics Departments**

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|      |  |
|------|--|
| 1-5  | Harvard<br>Massachusetts Institute of Technology<br>London School of Economics and Political Science<br>Stanford University<br>University of California – Berkeley |
| 6-10 | University of Chicago<br>Princeton University<br>Yale University<br>University of Pennsylvania<br>University of Cambridge  |

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<sup>10</sup> "The 30 Best Universities in the World for Economics," *Business Insider*

## Table 4: U.S. Schools Offering the Ph.D. in Economics

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### MID-WEST

- Chicago, University of
- Cincinnati, University of
- Illinois at Chicago, University of
- Illinois at Urbana-Champaign, University of
- Indiana University
- Indiana University-Purdue University Indianapolis
- Iowa State University
- Iowa, University of
- Kansas State University
- Kansas, University of
- Michigan at Ann Arbor, University of
- Michigan State University
- Minnesota, University of
- Missouri at Columbia, University of
- Missouri at Kansas City, University of
- Nebraska at Lincoln, University of
- Northern Illinois University
- Northwestern University
- Notre Dame, University of
- Ohio State University
- Purdue University
- Southern Illinois University at Carbondale
- Washington University at St. Louis
- Wayne State University
- Western Michigan University
- Wisconsin at Madison, University of
- Wisconsin at Milwaukee, University of

### NONCONTIGUOUS

- Hawaii, University of

### NORTHEAST

- Boston College
- Boston University
- Brandeis University
- Brown University
- Carnegie-Mellon University
- City University of New York Graduate Center
- Clark University

- Columbia University
- Connecticut at Storrs, University of
- Cornell, University of
- Drexel University
- Fordham University
- Harvard University
- Lehigh University
- Massachusetts at Amherst, University of
- Massachusetts at Boston, University of
- Massachusetts Institute of Technology (MIT)
- New Hampshire, University of
- New York University
- Northeastern University
- Penn State University
- Pennsylvania, University of
- Pittsburgh, University of
- Princeton University
- Rensselaer Polytechnic Institute
- Rhode Island, University of
- Rochester, University of
- Rutgers University
- State University of New York at Albany
- State University of New York at Binghamton
- State University of New York at Buffalo
- State University of New York at Stony Brook
- Syracuse University
- Teachers College at Columbia University
- Temple University
- The New School
- Yale University

## PACIFIC

- California at Berkeley, University of
- California at Davis, University of
- California at Irvine, University of
- California at Los Angeles, University of
- California at Riverside, University of
- California at San Diego, University of
- California at Santa Barbara, University of
- California at Santa Cruz, University of
- California Institute of Technology (Caltech)
- Claremont University
- Oregon State University
- Oregon, University of
- Southern California, University of
- Stanford University

- Washington State University
- Washington, University of

## ROCKY MOUNTAINS

- Colorado at Boulder, University of
- Colorado School of Mines
- Colorado State University
- Nevada at Reno, University of
- Utah State University
- Utah, University of
- Wyoming, University of

## SOUTHEAST

- Alabama at Tuscaloosa, University of
- American University
- Arkansas at Fayetteville, University of
- Auburn University
- Clemson University
- Delaware, University of
- Duke University
- Florida International University
- Florida State University
- Florida, University of
- George Mason University
- George Washington University
- Georgetown University
- Georgia Institute of Technology (Georgia Tech)
- Georgia State University
- Georgia, University of
- Howard University
- Johns Hopkins University
- Johns Hopkins University (SAIS)
- Kentucky, University of
- Louisiana State University
- Maryland at College Park, University of
- Memphis, University of
- Miami, University of
- Middle Tennessee State University
- Mississippi State University
- Mississippi, University of
- New Orleans, University of
- North Carolina at Chapel Hill, University of
- North Carolina at Greensboro, University of
- North Carolina State University
- South Carolina, University of

- South Florida, University of
- Tennessee, University of
- Tulane University
- Vanderbilt Law and Economics
- Vanderbilt University
- Virginia Tech
- Virginia, University of
- West Virginia University

## SOUTHWEST

- Arizona State University
- Arizona, University of
- Houston, University of
- New Mexico, University of
- Oklahoma State University
- Oklahoma, University of
- Rice University
- Southern Methodist University
- Texas A&M University
- Texas at Austin, University of
- Texas at Dallas, University of
- Texas Tech University

Armed with this list, how should you identify possible departments for further study? The following is a list of criteria you may want to employ in evaluating departments. Individual criteria are not listed in order of their importance; you must determine what is important.

### *Professional Status of the Department*

Would you prefer to attend one of the more prestigious departments (and do you have the qualifications)? If so, then the top six rankings in Table 3 are your guide. Keep in mind that in the past, the academic economic community has been very stratified. A graduate of one prestigious school may be employed by another prestigious school and may be avidly sought after by the lower-rated ones, while a graduate of a little-known department is likely to move on to another little-known department, or possibly into government or employment in which one is judged more by what one can do than by the prestige of the school from which one graduated.

### *Location of the School*

If you have a preference as to the part of the country in which you want to study, Table 4 should assist you in identifying schools in your preferred region. If your graduate school professors are willing to help in your future job search, their contacts are likely to be local with the exception of top-rated institutions, and thus they can be most helpful in the immediate region.

### ***Maturity of the Doctoral Program***

You may prefer one of the more mature departments or one of the newer programs. Newer departments may try harder. Being smaller, and knowing that the reputation they have yet to build will be through their products, they may invest more time in the development of individual students. Or, being insecure, they may be more conservative and traditional. They may seek to copy the prestigious programs rather than trying to be innovative.

### ***Information from Descriptive Brochures***

You should select a few economics departments from this list for a more thorough investigation. Most departments publish descriptive brochures which they will mail to prospective students, or which may be available on-line. Program descriptions can also be found in the latest *Peterson's Annual Guides to Graduate Study — Economics*, or the AEA's *Graduate Study in Economics*. These two resources offer brief summaries of each department and its program. While you should perhaps focus on your selected schools, browsing is a good idea, for you may discover possibilities you had not previously considered. What are some of the criteria to keep in mind?

### ***Curriculum Design***

- Largely prescribed or elective?
- Narrow in focus or broad?
- Confined to economics courses or permitting some from other fields?
- Prerequisites?
- Math requirements?
- Traditional in design, innovative, or experimental? Adequate course alternatives?
- Adequate areas of specialization?
- Enough course offerings and faculty members actively doing research in your area of special interest?

### ***Department Specialization***

- Is there any evidence that the department is trying to make anything special of itself?
- Beware of the unfocused aim of general or all-around excellence. Are the specialties of the department of real interest to you?
- Are they marketable?

### ***The Department's Values***

Watch for clues as to what the department really values. What kind of information is stressed about its faculty members or its graduates — scholarship, teaching, status, number of publications? What is stressed in its view of economics — rigor, relevance, the place of applied or institutional economics? In the description of the goals of the department's Ph.D. program, what seems to be most important? How does the department seem to value teaching, research, and public service?

### ***Department Size***

A class of around 50 graduate students has been suggested as an optimum size, large enough to permit a reasonable variety of courses and to foster an effective intellectual community of students. You will learn a great deal with and from your fellow students. In very large departments, one's choices and contacts may be increased, but possibly at the expense of impersonalization. The reverse may occur in very small departments.

### ***Cost, Assistantships, and Student Aid***

If these considerations are important to you, contact the university's graduate office or the department and request information. Usually, there is considerable financial assistance available for graduate study.

### ***Student Body***

Are most of the students full-time? Is there a large component of the program that is taught in the evening for part-time students? Is a large part of the student body from foreign countries? What percentage of the students is supported by assistantships?

### ***Interpreting Graduate Catalogs and Materials***

From your survey of department brochures and national guides to graduate Economics departments, you should be able to narrow your choice to several which appear to meet your goals and fit your constraints. Write to those departments for catalogs and application blanks, or inspect the catalogs found in your school library. Your professors may have suggestions, although you may want to discount recommendations that you attend their alma maters. In addition to the above criteria, here are other kinds of information that the catalog may contain or that you can search out from other sources.

### ***Department Efficiency, Courtesy, and Imaginativeness***

A department may reveal itself to you by the way it responds to your interest. Has it been prompt, imaginative, and helpful in designing materials to aid your choice?

### ***Teaching***

How seriously does the department take its teaching? For example, are new graduate students just out of undergraduate school immediately assigned to teaching? This may be a clue that the department really does not take teaching seriously and exploits cheap student labor in order to free faculty time for research. Is there a teaching seminar for graduate students who are being trained to teach? Is there a carefully planned teaching apprenticeship as part of the Ph.D. program? Or does the department leave students to learn these skills for themselves?

### ***Quality of Faculty***

The list of faculty or perhaps brief biographies the department may provide should indicate where faculty members received their degrees, what their scholarly interests are, and where and how



recently they have had books or articles published. How many faculty members really seem to have a currently vital professional specialty?

### ***Employment Market***

Where are its graduates placed? Does it have contacts with markets for the kind of employment you want? This test is particularly important because it provides a market evaluation of the quality of the program.

### ***Special Facilities and Programs***

What is the quality of the school's library, computers, and data banks? What does it offer in the way of lecture programs, seminars, workshops, and visiting professors? How successful are its faculty in obtaining outside funding and grants?

The information in Table 5 will be useful to you in preparing for and applying to graduate school.

## **Table 5: Calendar for Graduate School Applicants**

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- ***Sophomore and Junior Years*** – Prepare; choose your curriculum carefully; consider your career goals and possible areas of specialization.
- ***Early in your Senior Year*** – Review your goals and constraints, put together your list of potential schools, and take the GRE. The GRE is similar to the SAT or ACT, only more difficult. Many schools require this test in order for you to be considered.
- ***Late fall semester, Senior Year*** – Survey flyers, write for information, and make application to three or more schools, including a sure one.
- ***January to April*** – Await results, make plans to relocate and enjoy commencement.

## **Economics as an Avocation**

After all this discussion of economics careers and graduate schools, the truth of the matter is that most students who take the principles course will not major in economics. Even those majoring in economics are likely to be employed in some occupation other than that of economist. For the majority, economics will be, at most, an avocation that makes you a more informed citizen. Some of the economics you have learned in this course will be superseded by new theories, new institutions, and even new problems. Ten years ago economics textbooks devoted much less space to international economic issues and the linkages between national economies that are now of such great concern. You have, however, learned principles that will allow you to sort through these new problems. The course you have just finished will have been successful if it opened your eyes to how the economy works and sparked your interest in studying it!

### **Regular Reading for the Armchair Economist**

While professional economists read journals such as *The American Economic Review* or *The Journal of Political Economy*, there is considerable reading material available for the armchair economist who wishes to keep abreast of new developments and economic events. Here are some suggestions for daily, weekly, monthly, or occasional reading:

**Daily.** A good local newspaper and the *Wall Street Journal*.

**Weekly.** Any good news magazine carries business and economics news, including *Newsweek*, *Time*, and *U.S. News & World Report*. If you are interested in international news with a strong economic flavor, the British weekly, *The Economist*, is an excellent resource. Weekly or bi-weekly business magazines include *Business Week*, *Fortune*, and *Forbes*.

**Monthly or Quarterly.** The Brookings Institution publishes the *Brookings Review* each quarter with policy analyses; its more conservative counterparts also have regular publications. The American Enterprise Institute publishes *Contemporary Policy Issues* and the Heritage Foundation, *Policy Review*. For interesting data sources and analyses of trends in particular areas, try *Monthly Labor Review* (employment, earnings, and consumer prices), *Survey of Current Business* (output, GDP, interest rates, international trade), *The Federal Reserve Bulletin*, and/or the *Review* published by your regional Federal Reserve Bank (money, banking, prices, and regional economic conditions). These quarterly *Reviews* are usually available free of charge. There are a number of issues-oriented magazines for popular consumption such as *Challenge: The Magazine of Economic Affairs*.

- **Every Thursday.** Money supply figures
- **First Week.** Unemployment for prior month, both actual rate and seasonally corrected rate
- **Second Week.** Producer prices (wholesale price index) for prior month, both actual and seasonally corrected index. (Either the first or second Friday of the month).
- **Third Week.** Industrial production index for prior month. Personal income for prior month. This is the only monthly national income figure, and thus, a monthly indicator of changes in aggregate output.
- **Fourth Week.** Index of leading indicators for prior month. This is an index of variables that tends to lead real output; that is, tends to indicate when booms or recessions are likely to be coming. Consumer price index for prior month, both actual and seasonally corrected index.

**Annually.** Both the Brookings Institution and the American Enterprise Institute publish an annual volume that examines public policy in various areas. The titles are *Economic Issues* for Brookings and *Contemporary Economic Issues* for the American Enterprise Institute.

This list is far from exhaustive. In addition to the regular flow of periodicals listed above, many good books on economic subjects written for popular consumption are listed in the suggested reading section at the end of principles textbooks chapters. There is no shortage of materials to keep your economics fresh, lively, and up-to-date. Happy reading!

The calendar of recurring economic events below should aid you in your continued study of economics. These events usually set off reactions in the form of interpretive news articles, editorials, comments by columnists, and television reporting and commentary. This calendar lists the monthly cycle and yearly patterns of recurring economic events and the release of important information.

- **January:** First week – AEA annual meeting. Early in month – annual economic review of the prior year and forecasts for current year abound in newspapers and periodicals; for example, the *New York Times*. After mid-month - Gross Domestic Product for the October – December quarter. Revised figures are often issued one month later. Last week – President's annual economic message and annual *Economic Report of the President*.
- **February:** Hearings by the Joint Committee on the *Economic Report*. Prominent economists usually appear. Their views are reported in the press. Budget is submitted.
- **March:** Final report of the Joint Committee on the *Economic Report*. Around the 20<sup>th</sup> – balance of payments for the prior year.
- **April:** Fourth week – Balance of payments for the first quarter. After mid-month – first quarter Gross Domestic Product; personal income figures by state for the previous year, final figures on preceding year for balance of payments and Gross Domestic Product.
- **June:** After mid-month – Second quarter Gross Domestic Product and state personal income. Late in month – Mid-year report of Council of Economic Advisors. Most state governments end their fiscal year on June 30<sup>th</sup> and begin the next on July 1<sup>st</sup>.
- **September:** Congress is supposed to complete the budget; if not, passes continuing resolution to keep federal government operating until budget is ready. Third week – second quarter balance of payments.
- **October:** First of the month – beginning of new federal budget year. After mid-month – third quarter Gross Domestic Product.
- **December:** Many organizations also sponsor forecast luncheons at this time of year to try to anticipate economic conditions in the coming year.