

INTRODUCTION TO THE STUDY OF ECONOMICS AT CLARK

Economics as a formal discipline of study is barely 100 years old, but in that time it has become one of the most popular areas of study. It appeals to students who are interested in social action, in analytical modeling, and those with career goals. This Handbook describes economics as a field of study and the economics program at Clark.

Economics focuses attention on the tradeoffs inherent in any choice involving the use of scarce resources. While economists may sometimes disagree in their conclusions, they share a common method or language for identifying and quantifying these tradeoffs. The economics major is designed to give you an understanding of the core theory of economics, the basic tools of statistical analysis, and the wide range of applications in areas as diverse as macroeconomic policy, economic history, and professional sports.

As an academic discipline, economics offers insights into a range of crucial problems facing the world today:

- Can we have both economic growth and a livable environment?
- How can the countries in transition to the market economy do it most easily?
- Does global economic change also improve the lives of people?

As part of the liberal arts education provided by Clark University, economics offers an excellent opportunity for you to develop skills that are in demand for a wide range of careers and many programs of graduate study:

- Banking, insurance, finance, and many other business fields.
- Planning and research in environmental and urban studies, social welfare programs.
- International business and finance; international development.
- Advanced study for degrees in law, public policy, and business administration.
- Economics as a profession, including teaching, research and public policy.

The Economics Department at Clark offers study leading to the BA, MA and PhD. The existence of a graduate program results in an unusual variety of courses, of substantial breadth, and significant depth. Graduate students occasionally take courses designated for juniors and seniors, and advanced undergraduates are permitted to take any course for which they have satisfactory preparation.

This Handbook provides a user's guide to the economics major. The First Year Program provides an overview of the courses that introduce the discipline of economics. [THE MAJOR](#) discusses the ins and outs of declaring a major, finding an advisor, and satisfying requirements. Students completing the economics major find that their choices after graduation--whether graduate education or career opportunities--are enhanced if they have tried [CUSTOMIZING](#) their major.

Many students have used [INTERNSHIPS](#) in the public sector and business, to acquire "hands-on" experience that makes use of their economics background. [STUDENT ORGANIZATIONS](#)--the Undergraduate Economics Club and the Omicron Delta Epsilon honor society--host talks and social events to help students in economics get to know each other and share common interests.

An important part of the senior year of a liberal arts education is the capstone experience. In economics, the capstone experience allows the student to put to use economic theory and quantitative skills to develop expertise in a research topic. The capstone is available in several different formats: a group or individual research project in a select number of upper division courses, a research project conducted independently with a faculty member, or for those meeting the academic qualifications, the HONORS Program.

Any professor is envious of the joy that comes with the discovery of a new discipline. The faculty of the economics department welcomes you to the department, and we look forward to the pleasure of sharing with you the discovery of familiar and newly developed concepts in economics.

Learning Outcomes for Economics Majors

1. Gain access to existing knowledge. Majors will be able to locate information in the academic and general literature on topics in economics. Majors will also be able to identify and collect data appropriate to a topic for economic analysis.
2. Acquire analytical skills. Majors will be able to identify economic analysis in both academic and general literature. This competency includes the ability to summarize an argument in the academic literature and interpret statistical results at the level of basic regression analysis.
3. Utilize existing knowledge to explore new issues. The student will be able to build on existing knowledge to analyze an economic issue or conduct a positive or normative analysis of a policy proposal.
4. Present ideas in written and oral or other form. The student will be able to present economic arguments and analysis in a paper (of a minimum of eight pages). The student will be able to present economic arguments and analysis to an audience.
5. Develop a skill set appropriate for later employment. The Economics major is not focused on providing career skills but students will develop a variety of skills and techniques that can enhance employment opportunities. These include written expression, spread sheet analysis, statistical analysis, and presentation tools such as PowerPoint.

THE FIRST YEAR PROGRAM

- [Where Do I Start?](#)
- [Advanced Placement](#)
- [Transfer Students](#)

Where Do I Start?

For most first-year students, there is little difficulty in choosing which economics course to take. Economics 10 – Economics and the World Economy, is the first in the sequence of courses. Econ 10 is a prerequisite for all other econ courses, and is required or recommended by many other disciplines at Clark.

Economics 10 – Economics and the World Economy

Economics 10 has been designed to fit the guidelines for a global comparative perspective course (CP). It provides a one semester introduction to economics, and is an excellent introduction to the economic approach to problem solving and analysis.

There is no special math requirement for Econ 10 beyond that for admission to Clark. The course takes a number of simple, but powerful tools of economic analysis and applies them to a variety of social problems in a global context. These problems, such as housing the homeless, dealing with the drug problem, and determining the salaries for baseball players--to give a few examples--are all ones in which there are a number of different approaches to resolving them. Econ 10 puts particular emphasis on comparing political solutions with the alternative of market-based solutions, and in so doing, gives you an understanding of how economists think.

Advanced Placement

Some students come to Clark with previous course work in economics, usually through AP credit. For some of these students, ECON10 might not be the starting point. If you have any questions about which course is best to start, please contact the undergraduate program director.

Transfer Students

Transfer students and first-year students with advanced standing follow different guidelines. If you have taken an economics course for college credit, and course credit has been accepted by Clark, you should talk to the undergraduate program director in the Economics Department about what course to take next. The undergraduate program director of the department will be happy to discuss your individual situation and, depending on the course you took, may be able to certify that you have already met the Econ 10 course requirement for other programs.

If you are transferring in more than one economics course, there are no general guidelines/or course equivalence. You should see the undergraduate program director of the department to clarify the specific courses for which you are to receive credit.

ELEMENTS OF THE MAJOR

- [Declaring](#)
- [Advising](#)
- [Requirements](#)
- [Capstone](#)
- [Courses from Outside of Clark](#)
- [The Senior Clearance File](#)

There are three important steps to beginning your major. First, you declare the major. Second, you choose a faculty member as an advisor. Third, you and your advisor prepare a planned course of study. All three parts are discussed below.

Declaring the Economics Major

To declare the economics major, you need two forms:

- the **Major Declaration Form**, which may be obtained from the Registrar's Office website: www.clarku.edu/offices/registrar/forms/declaration-form.pdf
- the Economics Department **Major-Minor Sign-Up Form**, which is available from the Department Office.

The Major Declaration Form must be signed by the undergraduate program director of the Economics Department. This form also allows you to change your advisor to a faculty member in the Economics Department. All of the full-time faculty in the department are willing to be advisors and you should feel free to ask anyone you want. However, if you prefer, the department will assign you an advisor.

The Departmental Advisor

The first activity between you and your advisor should be to prepare a planned course of study. This will be a guide for your course work and for the emphasis of related but non-economics department courses. See the Course Requirement Worksheet.

Your advisor not only can help plan the sequence of your courses for the major, but also interpret various academic regulations, guide you through the administrative bureaucracy, and help you customize your major so that it meets your needs as closely as possible. While you may get occasional reminders of the need to meet with your advisor, we assume that you will take the initiative to see him or her when you need some advice, and we encourage you to do so. If your advisor is on leave or unavailable for consultation, you should seek the advice of another member of the faculty.

Requirements for the Major

There are a total of eleven courses required for the economics major. Six of these are specific core economics courses, four are electives in economics, and one is related course outside the department. All courses are to be taken on a graded (i.e. not P/NR) basis. In addition, every major is expected to complete a capstone course that is typically taken during the senior year. Majors must have a grade point average of 2.0 for the ten required economics courses. The details of these requirements are as follows:

1) Core courses

Econ 10, Economics and the World Economy

Econ 11, Principles of Economics

Econ 160, Introduction to Statistical Analysis

Econ 205, Microeconomic Theory

Econ 206, Macroeconomic Theory

Econ 265, Econometrics

The core courses provide every economics major with a common background in economic theory and quantitative skills that are then applied in the 100- and 200-level electives. Economics 10 is required for most 100-level courses and Economics 11 is required for 200-level courses. You are strongly encouraged to complete these core courses by the end of your junior year. Students who complete them early on find that the skills they offer help them get the most out of the elective courses. In any event, you should schedule your courses so that you have completed your core requirements before you enroll for the capstone course during your senior year. The core courses must all be taken in residence at Clark, in the Undergraduate College. If you have any questions, please see the undergraduate program director. A minimum grade of C- must be earned in each of the required core courses.

2) Economics electives

Four economics courses other than the above. At least three of the four must be at the 200 level. An internship ordinarily may not be used to satisfy one of the electives or course requirements. One exception is that an internship in Washington, DC on a regular Clark program with a placement in an agency or department that has an orientation in economics may satisfy one unit of economics elective credit at the 100 level. Prior approval from the Department Chair is required.

3) Capstone course

A capstone course, taken during the student's senior year is required. This offers an opportunity to draw upon the skills and background acquired during the previous years of study. The capstone courses allow students to acquire in-depth knowledge of a topic of

interest using a combination of economic analysis and empirical research. Completing ECON265 is required before taking the capstone course. The capstone course counts as one of the four economics electives

There are three ways of meeting the capstone requirement:

- a) Participation in the Honors Program.
- b) 200-level economics elective course.
- c) Directed Research course. Under exceptional circumstances, for students who are unable to meet the capstone requirements through (a) or (b) special arrangements can be made for individually directed research work.

You are required to submit a "capstone approval form" to the Department during the first two weeks of the semester during which you are taking the course. The form must be signed by the professor in the capstone course. In the semester in which you take your capstone course, you will be required to present a poster at the Economics Department Capstone Poster Session which is held on the last Monday of each semester.

4) Related and Recommended courses

The related course must be either MATH119 (pre-calculus) or MATH120 or MATH124 (calculus/honors calculus). Calculus is recommended for all majors. A calculus course taken elsewhere can satisfy this requirement as long as it receives Clark credit.

Economics majors are also recommended to complete two courses that are offered outside of the economics department which are related to the goals of the economics major. This is an opportunity for you to integrate courses from other departments with your economics courses, not a binding constraint (it is not reviewed by the department for completing the major). Obvious choices include courses in accounting, finance, management information systems (MIS) and operations management from the management department, and courses in computer science, economic geography, or advanced mathematics. Courses in international development, history, or political science also integrate well with some economics courses. You can consult with your departmental faculty adviser for further suggestions on how to relate other courses to your economics interests.

Internship credit does not ordinarily count as fulfilling one of the eleven economics courses required for the major.

Non-Clark Courses in the Major

It is expected that all of the six required core economics courses be taken at Clark in the regular day school program (not COPACE). You should plan your schedule so that you do not have to take any of the courses, Econ 10, 11, 205, 206, 160 or 265 in summer school or at another college or university.

If you are a transfer student, courses taken for college credit before you enrolled at Clark may meet the requirements of one or more of the core courses. Please consult with the economics department undergraduate program director about this.

Elective courses and related courses do not have to all be taken at Clark, although we expect the majority of these courses to be completed at Clark. You should check with your advisor as to the suitability of a course, before you take it. Some courses listed as "economics" at other colleges are much closer to the courses taught in the Graduate School of Management at Clark, and cannot be used as economics electives. You should also make sure that an off-campus course is not the same as a Clark course you are also planning to use as a major credit. There is not much standardization in naming courses. In all cases, check with your advisor.

CUSTOMIZING YOUR MAJOR

--to suit your interests, your plans for Post-Graduate Education, or your Career

While the economics major offers a key building block for a liberal arts education, you can do much to tailor it to your own individual career or educational objectives. By making appropriate course choices within and outside the major, you can demonstrate to prospective employers and graduate school admissions committees that you have prepared yourself well with a challenging and solid academic program. In thinking about how to make your major the most valuable experience you can, you should also be sure to consult with your department advisor, the Clark Career Services Office and the admissions offices of any graduate or professional schools you hope to attend.

Areas of focus

- **International Economics and Economic Development**
- **Urban Development and Social Change**

Students with interests in urban issues may develop them through the concentration in Urban Development and Social Change. Economics 160 (Introduction to Statistical Analysis) can be taken to meet the research methods requirement for the concentration, and Economics 277 (Urban Economics) counts towards the requirement for five courses in urban issues. Students who would like to know more about integrating their major with the concentration may contact with Prof. Brown.

- **Environmental Issues**

Unhealthy air and water, toxic waste dumps, destruction of rain forests, global warming – many of these local and global environmental problems are often by-products of individuals simply trying to do the best things for themselves and their families. While natural and physical sciences can warn of the extent of these problems and help develop technologies to alleviate them, the study of the human behavior that results in environmental damage can

inform us of why individuals made these particular decisions. Economics, as a social science, studies human behavior by analyzing the choices individuals make within their natural resource and institutional constraints. Majoring in economics with a focus on environmental issues is an excellent way to learn how to conceptualize these problems and analyze policy options designed to alleviate them. The key environmental courses are Environmental Economics (ECON254) and Natural Resource Economics (ECON253). Depending upon individual student interests other courses that are most relevant to understanding these issues include Economic Development (ECON128), Urban Economics (ECON 277) as well as courses in IDCE and Geography.

Career and post-graduate education

- [Employment in Business](#)
- [Pre-Law](#)
- [Pre-MBA](#)
- [Secondary Teaching](#)
- [Graduate education in economics](#)

The following are some suggestions for enhancing the major. As you will see, a common thread in all of these suggestions is the acquisition of an important core set of skills: writing, analyzing problems and reasoning, and being comfortable with quantitative analysis. Virtually all careers draw heavily on this basic set of skills and it is important that you are able to demonstrate that you have mastered them.

The International Studies Stream

The International Studies Stream allows students to major in a traditional department while emphasizing one of the two areas. Courses in the student's major are integrated into the Stream, and become part of that program. The Department of Economics heartily endorses this program and welcomes students who have been admitted to it. Consultation with your advisor in the Economics Department will allow you to plan your full course of studies in a way that ensures completion of all requirements.

Employment in Business

Employers appreciate job applicants who can demonstrate good oral *and* written communication skills and familiarity with quantitative tools and methods. A student considering a career in business would do well to take courses that emphasize writing, both in and out of the econ department. Econ 265 (Econometrics) may be of particular interest to students looking for practical applications of statistical methods. Familiarity with statistical programs is also helpful, and while a number of economics courses make use of computers, a course in computer science will provide a formal introduction to the concepts that underlie modern computing. Almost all economics majors planning on business careers take courses in the Management program. The most popular useful course is introductory accounting.

The value of an economics major to a prospective employer is that the student/applicant has been trained in a rigorous academic discipline. Most of your training is ahead of you if you choose a business career, but that training is generally made more efficient with an educational base in economics.

Finally, a good internship, either in the summer or during the academic year, can be extremely helpful in providing both practical experience in a field of employment and a preview of just what such careers entail. Internships even lead to employment offers. On the other hand, some students have discovered that the field they were planning to work in is not for them - also a useful educational experience.

Pre-Law

The economics major is a common and desirable precursor to the study of law. The major can offer the writing and analytical reasoning skills law schools are looking for. Within the major, any of the capstone courses offer opportunities for writing as well as oral presentations. Seminar-type courses also enhance these skills. The study of law in the late twentieth century is often concerned with principles of microeconomics and the construction and enforcement of regulation is the application of micro theory. Courses such as Industrial Organization, Environmental Economics, and Monetary Economics are particularly well suited to the pre-law student.

Outside of the Econ Department, many courses can help you develop the skills that are needed for success in the law. Those that stress the development of language skills and creative power in thinking are highly recommended. Many students find that courses in philosophy that help them develop reasoning skills and the ability to think logically are helpful. The Pre-Law Handbook, available from the Pre-Law advisor in Career Services, offers the most up-to-date information for you. Details are also available [here](#).

Finally, you may find Clark's interdisciplinary concentration in Law and Society a nice framework for including your interest in law with your economics major.

Pre-MBA

Economics constitutes an excellent major for a student interested in the pursuit of an MBA, including the five-year BA/MBA program. If you are interested in the BA/MBA program, you should consult the undergraduate advisor in the Graduate School of Management, as requirements come early in your course of studies. Here again, coursework that enhances your writing and oral communication skills is helpful. The better business schools also look for students who have developed a good quantitative background. Many of the best graduate schools of business require introductory calculus (Math 120). If you wish to develop your quantitative skills within economics, you would be well advised to consider Econ 271 (Math for Economists). Courses dealing with financial matters such as Money and Banking are good background for the study of business.

Beyond these skills, some additional background in computer science is useful. An internship with substantive responsibilities can be very helpful, but one should exercise care in the selection of internships.

Secondary Teaching

Students interested in meeting the requirements for secondary school teaching of social studies will need additional courses in Education. For information concerning current requirements, please see the Education Department.

Graduate Study in Economics

Many graduate schools offer both the masters and doctorate in economics and related fields. Traditionally the master's degree in economics has been viewed more as a consolation prize to doctorate students who wished to cut short their studies, but today there are a number of good masters programs in areas with a focus on specific applications, such as international finance, public policy or planning.

The Ph.D. is the degree required for virtually all college and university teaching positions and many research positions with the title of economist. We recommend that if you are thinking of a position in research that you point your studies towards a Ph.D. (Most doctoral programs in economics are set up to admit students with a BA. An MA would not be a first step to doctoral study.)

The advanced study of economics is analytical and quantitative in nature, and a strong academic record with strong grounding in mathematics is generally important for admission to and success in a graduate program in economics. Calculus is essential and additional math courses, including multivariate calculus and linear algebra, are desirable. Econ 271 (Math for Economists) is a nice complement to your economic theory courses. Because we have a Ph.D. program in economics, a number of advanced courses are available to undergraduates that would normally not be. You should consult with your economics advisor.

THE MINOR

Even if you major in another subject, you can still continue to explore economics in some depth through a minor. It is important to discuss a minor with your advisor in your major field so that the specific courses taken integrate with your major. You do not need to have an advisor in the economics minor. The most common majors for the many students who minor in economics include management, math, and political science.

There are six economics courses required for the econ minor. Two of them are Econ 10 and Econ 11. The remaining four are any other courses in Economics. At least two of these additional courses must be at the 200 level. Internships may not be taken to satisfy the six course requirement. A minimum of a C- must be earned in each course in order to receive minor credit.

To declare a minor, simply fill out the declaration form and bring it to the Economics Department office, JC 124. The Undergraduate Program chair will then approve the form for you.

INTERNSHIPS

The Economics Department participates in the university Internship Program, which allows students to spend a semester working full- or part-time outside the classroom as part of their academic experience. Contact the LEEP Center for details. Internships are available with many firms and public agencies in both Worcester and the Boston area. Students with an interest in public policy issues have benefited from the internships in federal agencies set up through the Washington Center Program through the LEEP Center. An internship offers you an opportunity to explore career interests. Many students focus their attention on financial services, but excellent opportunities are available elsewhere that could ensure you more hands-on experience. Students have used internships in the Boston Redevelopment Authority, the Blackstone Valley and Worcester Chambers of Commerce, the Main South Community Development Agency, and other organizations to gain first-hand knowledge of economic issues and how they matter in a wide range of settings.

Internship credit does not ordinarily count as fulfilling one of the eleven economics courses required for the major. An exception to this is a Washington internship on a regular Clark program with a placement in an agency or department that has an orientation in economics (e.g. the Treasury Dept., OMB, or a Congressional Committee with economic responsibilities). If economics course credit is to be given, such an internship must be approved in advance by the undergraduate program director.

STUDENT ORGANIZATIONS

All students interested in economics are invited to join the Undergraduate Economics Society. The Society hosts career forums, panel discussions, and social events to those interested in economics as an opportunity to get to know each other and keep informed on topics of mutual interest. Recent events have included a career forum with recent graduates of Clark and a field trip to the New York Federal Reserve Bank and the New York Mercantile Exchange.

Clark also has a chapter in the international economics honor society, Omicron Delta Epsilon. The ODE offers members a number of benefits, including access to other members from around the world and opportunities to publish original research.

Membership is open to junior and senior economics majors who have completed at least six economics courses with a specified high grade point average. For juniors the required econ GPA is 3.5; for seniors it is 3.25.

HONORS, AWARDS, AND SUPPORT FOR STUDENT RESEARCH

Majors in economics have a number of opportunities to earn recognition for their academic achievement. Every year, a select number of majors are chosen for Omicron Delta Epsilon (ODE), the honors society in economics. More details about the ODE is provided on the student organizations page of the Handbook. In addition, from seven to twelve students elect every year to work towards departmental honors. Honors theses written in recent years have included studies of AIDS in South

Africa, the impact of global climate change on agriculture in the United States, contagion in financial markets, and role of integration of the global economy on the well-being of women. Generous donations from Clark alumni and former faculty have funded several awards for students. Finally, alumni contributions have established endowments that provide support for student research.

- [Honors](#)
- [Awards](#)
- [Support for Research](#)

The Honors Program

Departmental Honors are awarded to economics majors at graduation on the basis of their grade point average and the completion of an honors thesis of sufficiently high quality. In order to enroll in the Honors Program (Econ 297) you must have at least a 3.6 average in economics courses and a 3.0 overall GPA. We also expect that you will have completed all (or all but one) of the six required courses for the major by the end of your junior year. All students taking honors should have already completed Econ 265 (Econometrics) before starting the honors course.

During the spring of your junior year, you must choose a thesis advisor and thesis topic in order to receive permission to take the honors course. Your major advisor can help you in this. In most cases, the topic is something you found interesting in one of your previous economics courses and would like to follow up on. The thesis topic should be explored in some depth, so we recommend doing your thesis in an area in which you have already taken at least an introductory course.

You should informally discuss the thesis topic with your faculty thesis advisor and enroll for credit in Economics 297 (Honors) during the fall of your senior year. The Honors course includes assignments on doing empirical research and writing up of results. Under the supervision of your thesis advisor, you will begin your thesis research during the fall and complete the research and thesis-writing during the spring semester. If you wish, you can receive academic credit for the Honors course in both the fall and spring semesters, but only one semester counts as an elective course towards the major.

After completing the thesis, you will share the results of your research, so that other students can both benefit from your work and get an idea of what is involved in doing an honors thesis. You will prepare a poster describing your research at Academic Spree Day. In addition, you will present your work to the department in an informal seminar.

Once the thesis has been completed and presented, the department meets to consider it and your academic record, and then recommends the appropriate level of departmental honors. The department can recommend that you graduate with Honors, High Honors, or Highest Honors. You receive a grade in Economics 297 based on your thesis supervisor's evaluation of the thesis, but a passing grade on the thesis does not necessarily mean that departmental honors will be awarded.

If you are interested in finding out more about the honors program, please talk to your advisor and take a look at some of the honors theses that have been written by previous students (available in the department office).

Awards

Each year the Economics Department designates winners of awards for excellence in work in economics. These include:

David R. Porter Prize for Excellence in Economics, awarded to a senior in economics in the fall of their senior year.

Harry B. and Alice N. Sheftel Prize in Economics, awarded to an outstanding senior in economics before Commencement.

Roger Van Tassel Book Award, given to a freshman or sophomore for excellence in Econ 10 or Econ 11.

Support for Student Research

Advanced students in economics have many opportunities to carry out research as part of their capstone projects. Those completing honors theses may apply for the Harry B. and Alice N. Sheftel research grants for undergraduates, for which applications are typically completed in early October. The Sheftel research grants fund the acquisition of data or other expenditures for a project, including the purchase of computer software, and research visits at local libraries.

On occasion faculty grants provide support for advanced undergraduate research.