

STUDENT HANDBOOK



2006 - 2007



DEPARTMENT OF ECONOMICS
REED COLLEGE

FOREWORD

This document has been prepared by the faculty of the Reed College Department of Economics to help guide economics majors through their studies. Much of the material included here is also available on the department's Web page at academic.reed.edu/economics. The Reed College Catalog, however, remains the definitive source for all information on curriculum and requirements. Nothing in this document should be construed as amending the Catalog in any way. Moreover, this document cannot serve as a substitute for direct advising by members of the faculty—only as appropriate preparation for such advising. Meet with your advisor early and often throughout your academic career.

1. CURRICULUM

Each economics course at Reed falls into one of three groups: introductory, core, or elective. Econ 201 is a single-semester introductory economics course. Econ 311 or 312, 313, and 314 are required courses for economics majors and comprise the core group. All other courses are grouped as 200-level, 300-level or 400-level electives depending on their prerequisites.

Introductory Economics

The introductory course, Econ 201, is a required prerequisite for most other courses offered in economics. Econ 201 covers microeconomics comprehensively and macroeconomics somewhat more briefly. It is pitched at a level that is commonly known as “intermediate” theory—more advanced than the standard introductory course. Our approach is characterized by the utilization of substantial and varied applications including student participation experiments, group projects, policy discussions, and problem solving. Students intending to take economics courses at Reed are strongly advised not to try to replace 201 with transfer work. However, those who believe that their background in economics is strong enough may take the department’s placement exam at the beginning of the academic year to determine whether they may waive the Econ 201 prerequisite for advanced courses.

The Economics Core

All majors are required to take microeconomic theory (Econ 313), macroeconomic theory (Econ 314), and one of the two econometrics course options (Econ 311 or 312). These courses provide the theoretical and methodological foundation for the study of economics. The microeconomics and macroeconomics courses should be taken as early as possible, ideally during the sophomore year.

The Econ 312 and 313 courses require some preparation in mathematics. For micro theory, students must be familiar with the basics of differential calculus. Those who have not taken calculus in high school or elsewhere may obtain the required preparation by taking Math 111 at Reed. A basic course in probability and statistics similar to Math 141 at Reed is required for Econ 312.

As noted above, economics majors are required to take either Econ 311 or Econ 312. Since these courses provide background for thesis research, this requirement should be fulfilled no later than the junior year. Either of these courses will provide knowledge to help the student read and understand empirical literature in economics. Econ 312 emphasizes learning to use econometrics and provides considerable

hands-on experience with performing econometric analysis. Students who are considering the use of econometric methods in their thesis research are strongly advised to take Econ 312.

Elective Courses

Elective courses are offered at the 200-, 300-, and 400-levels. Those offered at the 200-level have no prerequisite. Elective courses that have a prerequisite of one or more of the core courses are 400-level courses, while those requiring only Econ 201 are numbered at the 300-level. Elective courses usually have a mix of major and non-major students, although the concentration of economics majors tends to be greater in courses offered at higher levels. In order to fulfill their 10 units of economics, majors take four (or more) elective courses in addition to Econ 201, the core requirements, and thesis. At least three of the four elective units must be upper-division (300- or 400-level).

Economics Courses

The following course descriptions are taken from the text of the 2006-07 Reed College catalog. The timing of the course (fall versus spring) and the instructor's name are also provided for the 2006-07 academic year. Due to our desire to rotate courses, and to rotate faculty through certain courses, there are always some changes in scheduling and course instructors from year to year. You can assume that courses required for the major will be offered every year. For more information about individual courses, please contact the instructors directly.

201 Introduction to Economic Analysis

The course analyzes the important economic issues and problems arising in the functioning of economic systems, with particular attention to the private enterprise economy. Important economic issues and problems include scarcity of resources, the opportunity cost of alternative resource allocation choices, the existence and importance of gains from exchange, the welfare implications of competition and monopoly, the causes of unemployment and inflation, the functioning and malfunctioning of monetary and fiscal institutions, and the requisites for and obstacles to economic growth. Lecture-conference and laboratory. (Fall, Parker; Spring, Hare).

[Note: The content of Econ 201 will change after Fall 2006. Beginning in the spring of 2007, the macroeconomics section of the course will be eliminated (though some macroeconomic topics will be integrated in the microeconomics section). In addition, the lab activities will be folded into the regular class sessions rather than as a separate

meeting. A new, mid-level macroeconomics course will be added to the curriculum in fall 2007.]

281 Collectivization and De-collectivization in the PRC

This class will examine processes of collectivization and de-collectivization in the People's Republic of China, focusing on the 1950's and 1980's respectively. We will examine primarily the agricultural sector and consider the two-way nature of the transition, from a system of private ownership to collective, and the subsequent retreat to decentralization. This approach will facilitate contrasts and comparisons of the organizational changes experienced by the economy and its participants during each of the two decades under study. We will seek to understand the interests of various stakeholders, their subsequent roles in promoting or resisting the changes, and finally how various societal groups were affected. Among the materials we consider will be narrative accounts from various perspectives in addition to secondary sources that analyze the transition processes and their outcomes. Conference. (Not taught 2006-07.)

311 Survey of Econometric Methods

An introduction to applications of empirical methods in economics. Students are introduced to the nature and sources of economic data and basic concepts of statistics and econometrics. Topics include the estimation of econometric models, hypothesis testing, and forecasting. Emphasis is placed on the use of these techniques in empirical economic literature. Prerequisite: Economics 201. Lecture-conference. (Fall, Netusil).

312 Theory and Practice of Econometrics

An introduction to the statistical methods commonly used in economic research. Classroom development of theoretical material is combined with extensive hands-on practice of econometric techniques. Statistical methods discussed include estimation and inference in simple and multiple linear regression models, detection and correction of autocorrelation and heteroskedasticity, time-series models and distributed lags, and estimation of systems of simultaneous equations. Considerable emphasis is placed on learning to specify, implement, and evaluate tests of economic hypotheses. Prerequisites: Economics 201, Mathematics 141 or similar introduction to statistics; or consent of the instructor. Lecture-conference and laboratory. (Spring, Parker).

313 Microeconomic Theory

This course provides a thorough exposition of neoclassical theories of producer and consumer behavior. Considerable attention is devoted to understanding the economic concept of efficiency and demonstrating the efficiency of competitive equilibrium in a general equilibrium framework. The efficiency of market outcomes under

alternative assumptions is also examined, and some time is devoted to discussing social choice theory and the limits of the market. Prerequisites: Economics 201 and Mathematics 111, or consent of the instructor. Lecture-conference. (Fall, Hare).

314 Macroeconomic Theory

A detailed introduction to modern theories of economic growth and business cycles. Emphasizes the derivation of relationships among aggregate variables from assumptions about the behavior of households and firms. Examines empirical evidence for and against macroeconomic theories. Lab session focuses on applying macroeconomic analysis through solving theoretical problems and performing empirical projects using macroeconomic data. Prerequisites: Economics 201 and Mathematics 111, or consent of the instructor. Lecture-conference and laboratory. (Spring, Parker).

315 Game Theory

This course studies strategic behavior in multi-person games. We study various classes of games, including static and dynamic games as well as those of complete and incomplete information. We also consider various solution concepts, including iterated elimination of dominant strategies, Nash equilibrium, and evolutionary stability. Numerous refinements of the Nash equilibrium concept, including sub-game perfect Nash equilibrium, Bayesian Nash equilibrium, and perfect Bayesian equilibrium, are also considered. There will be a heavy emphasis on the application of game theory to the study of the real world. We apply game theory to the study of competition, the commons, bargaining, auctions, conventions, institutions, and political decision-making. Prerequisites: Economics 201, Mathematics 111 or the equivalent. Lecture-conference. (Fall, Stewart).

323 American Economic History

This course introduces the student to the economic history of the United States from colonial times to the present. Emphasis is placed on understanding the sources of economic growth and key developments in the historical economy, especially institutional change. Topics to be covered include colonial markets for labor and land, technological change, the growth of big business and regulation, labor and capital market integration, immigration and internal migration, standards of living, and the Great Depression. Prerequisite: Economics 201. Economics 311 or Economics 312 recommended. Conference. (Fall, Stewart).

331 History of Economic Thought

This course considers the development of economic thought by focusing on four crucial issues that economics has addressed throughout history: resource scarcity, the sources of economic growth, the role of government in a market economy, and the effects of international trade. We focus primarily on the development of economic

thought with regard to these issues between 1750 and 1970. Reading comes from the works of Smith, Malthus, Ricardo, Mill, Marx, Bentham, Walras, Marshall, Pigou, Keynes, Schumpeter, and others. Prerequisite: Economics 201. Conference. (Not offered, 2006-07).

341 Monetary and Fiscal Policy

A study of classical and contemporary monetary theory, the structure and operation of private and public monetary and financial institutions, and the techniques and objectives of monetary and fiscal policy. Contemporary policy problems emphasized include maintenance of full employment and economic growth, prevention of inflation, and economic stabilization. Prerequisite: Economics 201. Conference. (Fall, Parker).

342 International Macroeconomics

This course examines the macroeconomic linkages between countries. The theory of income determination, capital markets, and monetary policy is extended to the open economy. In this context, a number of issues are addressed, including currency crises, international policy coordination, and the choice of an exchange rate regime. Illustrations come from the recent Southeast Asian financial crisis, the proposed European currency union, the U.S. current account deficit, and the stabilization policies of Latin America. Prerequisite: Economics 201. Conference. (Fall, Chen).

345 European Economic History

This course studies the economic history of Europe between 1500 and 1950. Emphasis is placed on understanding the sources of economic growth, especially technological and institutional progress, and key developments in the historical economy. Topics to be covered include the pre-modern European economy, the Industrial Revolution, standards of living, the demographic revolution, the Gold Standard, migration and immigration, the Great Depression, and the convergence of growth. Prerequisite: Economics 201, Economics 311 or 312 recommended. Conference. (Spring, Stewart)

348 Economics of the Public Sector

This course considers the role of government in the economy. We examine the theoretical rationale for government intervention in the economy and the economic consequences of such government intervention, with examples coming primarily from the United States. In addition, the course studies how taxation affects economic efficiency, income distribution, capital formation, and microeconomic incentives. Major topics include environmental regulation, publicly funded education, welfare, social security, health care, tax reform, and issues of international public finance. Prerequisite: Economics 201. Conference. (Spring, Netusil).

351 Environmental Economics

This course presents an economic analysis of environmental issues and policies. We will examine the impact of the economy on the environment, the importance of the environment to the economy, and how policies such as transferable permits, subsidies, taxes, and regulations affect the environment and economy. Concepts covered in this course include static efficiency, equity, property rights, discounting, cost-benefit analysis, risk and uncertainty, market failure, non-market valuation techniques, and sustainability. Prerequisite: Economics 201. Conference. (Spring, Netusil).

352 Natural Resource Economics

This course presents an economic analysis of renewable and nonrenewable natural resources. Concepts introduced include static and dynamic efficiency, equity, property rights, discounting, market failure, non-market valuation, and sustainability. The course will cover current and proposed policies for resource management such as transferable quotas, taxes, subsidies, regulations, and public versus private ownership. Prerequisite: Economics 201 and Math 111 or consent of instructor. Conference. (Not offered, 2006-07).

354 Economics of Science and Technology

This course is an introduction to the economics of growth, innovation, and technological change in industrialized market economies. The neoclassical growth model is used as a theoretical basis for exploring empirical studies measuring the causes of economic growth. The causes and nature of innovative activity, as well as its effect on technological progress, are explored. Issues of appropriability and diffusion of technology are addressed. Industry and country studies are used to gauge the effect of technological change on economic performance. Prerequisite: Economics 201. Conference. (Not offered, 2006-07).

362 Industrial Organization

Full course for one semester. In this course we study imperfect competition and the policy responses to it that economists often prescribe. These responses generally fall into two categories: regulation and antitrust. We will introduce models to explain and predict firm behavior, and apply them to the telecommunications, electricity, airlines, and computer industries (among others). Topics include natural monopoly, optimal and actual regulatory mechanisms, deregulation, mergers, predatory pricing, and monopolization. Prerequisite: Economics 201. Conference. (Spring, Chen)

363 Economics of Labor

Analysis of the labor force and of labor market dynamics in the U.S. and in other industrialized countries. Topics include labor supply, labor demand, wage setting and wage differentials, unemployment, labor market implications of government policy (such as welfare reform, affirmative action, and immigration policy) collective bargaining, and alternative forms of worker representation. Discussion is focused on the statistical regularities observed within and across countries with respect to labor market outcomes, the theoretical models that have been advanced to explain these regularities, and the implications for policy of the empirical and theoretical findings. Prerequisite: Economics 201. Conference. (Not offered, 2006-07).

364 Economics of Population, Gender, and Race

This course will consider race and gender issues as they influence and are reflected in decisions about schooling, work, and family. It will also examine trends in population and consider how and why they might change over time. We will utilize microeconomic models of fertility, migration, decisions to work, and decisions to invest in human capital in an effort to analyze and explain observed outcomes. Drawing on well-established literatures in the fields of labor economics and economic demography to provide frameworks for our discussions, we will consider the theoretical and empirical findings in light of their potential contributions to policy. Prerequisite: Economics 201. Conference. (Fall, Hare).

371 Law and Economics

Applications of microeconomic theory focused on common law and the legal system. Topics include the effect of the legal system on resource allocation, the establishment and scope of property rights, allocation of risk and efficient investments in precaution, product liability, and an economic analysis of criminal behavior and punishment. Prerequisite: Economics 201. Conference. (Fall, Netusil).

382 Economics of Development

The economic problems and policy concerns of poor countries, with applications of economic analysis to explain and understand observed outcomes. Substantial attention is paid to the structure and the decisions of households in developing countries with supplemental focus on the market and non-market environments under which they operate, including their access to land, credit, and insurance, as well as their labor employment opportunities. Additional topics include population growth and its determinants, the role of technology, inequality and poverty, structural change, and trade and globalization. Case studies are used to motivate and illustrate the theories discussed. Prerequisite: Economics 201. Conference. (Not offered, 2006-07).

383 International Trade

This course analyzes the causes and consequences of international trade. The theory of international trade and the effects of trade policy tools are developed in both perfect and imperfect competition, with reference to the empirical evidence. This framework serves as a context for a discussion of several important issues: the effect of trade on income inequality, the relationship between trade and the environment, the importance of the World Trade Organization, strategic trade policy, the role of trade in developing countries, and the effects of free trade agreements. Prerequisite: Economics 201. Conference. (Fall, Chen).

385 Asian Economies in Transition

The course will consider processes of transition from planned to market-based economic systems. We will take a sectoral approach, taking note of variation observed across countries in policy objective, design, implementation, and outcome. Among the sectors we will consider are industry, agriculture, banking and finance, foreign trade and investment, and the public sector. While China and Vietnam, in particular, will offer an abundance of evidence for us to examine, we will also take into account the reform experiences of other Asian countries when relevant source materials are available. Prerequisite: Economics 201. Conference. (Not offered, 2005-2006).

401 Contemporary Topics in Economics

One-half unit course. A detailed examination of a topic of current theoretical or policy interest. The course may be repeated when topics vary, up to a maximum of one unit of credit. Prerequisite(s) will vary according to topic; they will be announced in the class schedule. This course may not be used for Group B or divisional requirements. The topics for 2006-2007:

International Integration. One-half course for one semester. This course studies the forces and actors that influence current trends in globalization—including firms and their foreign investment or outsourcing decisions, geography, information, and immigration. The class will first examine how information and geography help condition the integration of international markets. The next topic of study examines how multinationals decide to serve international markets. The class will also study the effects of firm decisions on host and home economies, including the effects on wages, productivity, and country use of protectionist measures. Prerequisite: Economics 383 or Economics 313. Conference. (Spring, Chen)

Economic Research Methods. One-half course for one semester. A survey of research methods designed to prepare juniors to write a thesis in economics. Prerequisite: Economics 313 and 314. Conference. (Spring, Stewart)

421 Economics of Reed College

This course examines the economics of undergraduate education, focusing on issues of relevance to Reed College and using Reed as a case study. Elements of institutional revenue and cost streams are analyzed. Among the specific topics considered are: measurement of the inputs, outputs, and productivity of institutions; economic returns from higher education, especially at selective liberal-arts colleges; the demand for higher education in general and for liberal-arts colleges in particular; the effects of need-based and merit-based financial aid on demand; fund-raising and management of endowment resources; the market for faculty and models of faculty salaries and benefits; internal allocation of resources among academic and administrative departments; funding and maintenance of physical plant; and the economics of residence halls, food service, and other non-academic aspects of higher education. Prerequisite: Economics 201 and one additional course in economics, or consent of instructor. Conference. (Not taught, 2006-07).

454 Economic Growth

Theoretical analysis of the roles of population growth, capital accumulation, and technological progress on economic growth. Diminishing returns and neoclassical growth theory. Human capital, nondiminishing returns, externalities, and modern growth theory. Examination of empirical evidence through growth accounting and cross-country econometric studies. Prerequisite: Economics 314 or consent of the instructor. Conference. (Not taught, 2006-07).

481 Independent Reading

Credit in proportion to work done. Prerequisite: junior or senior standing.

Note-Independent study courses may be arranged by juniors and seniors for one unit or one-half unit. Individuals desiring an independent study must find a faculty member willing to supervise the work. The student and faculty member must submit a petition to the Division of History and Social Sciences at the beginning of the semester detailing the content of the proposed course. Independent study courses are an overload for faculty, who are not obliged to undertake them. Reed does not allow independent study courses that duplicate the content of existing courses.

2. THE MAJOR

Economics majors must satisfy three sets of requirements: the general requirements of Reed College, those of the Division of History and Social Sciences, and those of the Department of Economics. The humanities and group requirements entail 13 Reed units of work, the divisional requirements add another two or four, depending on how the group requirements are met, and the major requirements adds another eight or ten, again depending on which courses have been used towards group requirements. Since 30 units are required for graduation, this leaves between three and seven “free elective” units that can be used for any courses the student desires.

First and Second Years

Many students do not become economics majors until their sophomore years. Some have even begun the study of economics as juniors and still managed to complete the major on time. A student following the ideal sequence of courses would take Econ 201 in the first year, the two core theory courses 313 and 314 plus one economics elective in the second year, two more economics electives and the required econometrics course as a junior, and the final economics elective and the thesis as a senior. However, there is considerable flexibility in this program and the timing of courses can usually be varied.

The timing of the other requirements is usually not crucial. However, students should avoid postponing the science and math or foreign-language courses required for Group C and D. The appropriate math courses will be of considerable benefit if completed prior to enrolling in Econ 313, 314, and 312. Those without a calculus background should take Math 111 in the first year to prepare to take Econ 313 and 314 in the sophomore year. Taking Math 141 in either the first or second year is highly recommended for students who plan to meet the econometrics requirement with Econ 312.

Transfer Students

Transfer students who wish to become economics majors often arrive at Reed with several economics courses from other institutions. These courses rarely correspond directly with the courses that would have been taken here, so it is often difficult for them to fit seamlessly into the sequence of the Reed curriculum.

A transfer who arrives at Reed with one year of college work completed should usually take Econ 201 immediately in the fall semester of the sophomore year, even if the student has a year of introductory economics from another college. Depending on the student's mathematics and economics background, the faculty may advise the student to take Econ 313 concurrently with Econ 201, or to wait until the junior year to take Econ 313. In either case, Econ 314 should be taken in the spring of the sophomore year.

A transfer arriving at the beginning of his or her junior year will normally have to compress most of the economics courses into two years. In some cases, it may be quite difficult or impossible for such a student to complete the ideal sequence of economics courses in four semesters. When it is not feasible to attend Reed for an extra semester, the student and the adviser will evaluate the student's prior coursework in economics and decide on the appropriate program for the junior and senior years.

Changing Majors to Economics

Many economics majors at Reed didn't intend to major in economics when they arrived. Many were undecided when they came to Reed; others started out majoring in math, science, another social science, or something else. Most get interested in economics while taking Econ 201, take another course or two, then finally commit themselves to the major as sophomores or juniors.

Students who take Econ 201 in their first year and take an additional economics course or two (ideally including 313 or 314) in the second year are well positioned to change to an economics major. Students who have completed only Econ 201 at the end of two years can still complete the major within a four-year program, although their economics courses will be compressed into a brief span of time and they must scramble to fit enough economics into the junior year to prepare themselves for the junior qualifying exam and the thesis.

A few students have completed an economics major in four years having taken no economics courses prior to the junior year. However, the course sequence for these students was so compressed that some encountered serious difficulties both with some of their courses and with preparation for thesis research.

Junior Year: Preparing for the Thesis

Students following the optimal sequence of courses will have completed the core courses in micro and macro theory as sophomores, opening up the entire range of economics electives for them as juniors. You are encouraged to use the junior year to explore broad topics of interest by taking two or three economics electives. The jun-

ior year is also the time to complete your methodological foundation by taking an econometrics course (if you have not done so earlier).

Junior Qualifying Examination

The junior qualifying exam is normally taken in April of the junior year. Juniors should watch for a sign-up sheet appearing mid-semester (usually sometime in February) on the door of the faculty secretary (Lois Hobbs in Vollum 112). The exam has two parts. One part of the junior qual is a set of three one-page thesis-topic summaries. These need not be full-blown proposals, but should be specific ideas that you think might be interesting to work on for a thesis.

The second part of the qual consists of written answers to questions on micro and macro. The faculty will prepare a set of eight questions in each subject in March of each year and distribute these to all students registered for the qual. On the date of the qual, students will be asked to write answers to three of the eight questions (selected by the faculty).

Students who perform satisfactorily on all parts of the qual will be advanced to senior standing. Those who show promise of eventually passing, but are deficient on one or more parts are often given a “conditional pass.” The condition is that the students prepare more extended essays on the exam questions on which their answers were inadequate, to be submitted to the faculty at the beginning of the next semester. Students receiving a conditional pass will be notified of the questions that require rewriting and of what is expected in the rewrite.

Senior Year

The Economics Department has established a series of deadlines and requirements for seniors to encourage a smooth and productive thesis process. Formal thesis proposals are required by the Division of History and Social Sciences and are due in early October. Since economics majors have written something similar as part of the junior qual, this deadline is usually not worrisome.

Coursework

Reed requires that all seniors pass at least six units during the senior year and at least two units during each semester. The senior thesis often absorbs most of your energy during this period, so it is not a good time to take particularly demanding courses. Many students who have postponed science or foreign-language courses to the senior year have suffered as a result.

Try to balance your load to avoid a heavy spring semester. Also balance your courses to mix problem-solving courses with reading- and writing-intensive courses. It is not a good idea to have to write five major term papers the same semester that you are finishing the thesis!

Thesis Adviser

At the beginning of the year, each senior should meet with members of the faculty to determine who would be the most appropriate adviser and first-draft reader for the thesis. While student preferences are weighed heavily in assigning advisers to students, the assignment is made by the department taking into account the expertise and advising loads of faculty members. Once this selection is made, the student and the adviser will normally work closely together through the year to assure that satisfactory progress is being made.

The thesis adviser bears direct responsibility for the supervision of the thesis. At the adviser's discretion, other members of the faculty should be consulted at appropriate stages of the thesis research. In particular, the first-draft reader often plays a substantial role in the advising of the thesis.

At the beginning of the research process, your adviser can assist you in finding leads to existing research in the areas you are exploring. It then becomes your responsibility to read these sources and use them (and appropriate indexes) to find additional materials. Most advisers hold regular conferences with thesis students, often on a weekly basis. You can make these conferences most productive by coming in with specific questions or problems you have encountered. If you have written drafts of sections of the thesis, bring them in a few days ahead so that your adviser has time to read them before the conference.

Unless you are told otherwise, ***anything that you turn in to your adviser should be double-spaced, laser-printed copy that has been spell-checked and proof-read for obvious grammatical errors.*** (Some advisors prefer to receive drafts in electronic form rather than on paper.) Correction of trivial spelling and grammar errors distracts the adviser from the important role he or she must play—making suggestions on the content and direction of your research. Countless seniors have wasted weeks of valuable time by submitting drafts that required their advisers' "pre-cleaning" before meaningful advice could be given.

Beginning the Thesis

A good thesis cannot be written in a month. Economics majors are expected to make steady progress throughout the year. Most theses begin with a comprehensive review of related literature. This is usually completed in the first semester and culminates in the preparation of one or more chapters of the thesis by the end of the term.

Theses that involve econometric analysis must normally have acquired all necessary data by the end of the first semester in order to allow sufficient time for analysis and writing in the second semester.

Mid-Year Oral Review

The Economics Department schedules an oral review for each senior during finals week at the end of the first thesis semester. Three or more economics faculty members participate in each student's review. The purpose of this review is to discuss the student's draft literature-review chapter(s) and the general progress and prospects for the thesis. It is much less formal than the oral examination at the end of the year.

First-Draft Deadline

The Division of History and Social Sciences has established a first-draft deadline approximately five weeks before the final thesis deadline. At that time, a *complete—both in content and format—first draft* must be submitted for reading by the advisor and first-draft reader. This deadline is enforced ruthlessly; failure to submit the first draft on time will prevent you from graduating with your class in May!

To prepare for the first-draft deadline, students should submit written sections and chapters to the adviser (and, if desired, the first-draft reader) throughout the second semester.

After the submission of the first draft, both the adviser and the first-draft reader will read the thesis carefully and make extensive comments. Some of these comments will relate to content and some to presentation. Sometimes an additional chapter or two will need to be added to the thesis between the first draft and the final draft, but usually the changes amount to substantial revisions of the existing text.

Final-Draft Deadline

The last Friday of classes is the deadline for submission of the final thesis to the Registrar. Students who miss this deadline but submit the thesis on the following Monday are fined. The thesis may be submitted up to the first day of the following semester with a larger fine. If you do not submit the thesis before the first day of the following semester, you must begin another one and retake the entire senior year in order to graduate from Reed!

Oral Examination and Final Thesis Work

The oral examination is given during the period between classes and final exams. It is two hours in length and is administered by the adviser, the first-draft reader, another faculty member chosen by the Division of History and Social Sciences, and a faculty member from outside the division chosen (and arranged) by the student.

Questioning normally focuses on the thesis, but can include the totality of the liberal-arts education. Usually the emphasis is on interpretation and understanding of the results and conclusions of the thesis rather than on details of the research. While it is a formal proceeding, the purpose is to explore the results and ideas that derive

from the thesis work rather than to determine an absolute judgment about their merit.

All four members of the orals board return their copies of the thesis to the student after the exam. The adviser often signs the signature page at this time. Traditionally, there are no revisions made after the oral exam. However, as revisions have become easier due to advances in computer text processing, it has become common for members of the orals board to make editorial comments about the final draft. At the discretion of the adviser, the student should be prepared to make necessary changes in the thesis and secure the adviser's approval before binding.

Once the final-final manuscript is approved by the adviser, it should be duplicated on suitably durable paper (Reed Printing Services will do this) and bound. There are several grades and colors of binding available for your selection. Two copies of the bound thesis must be submitted to the library before the established deadline. A copy is usually given to the adviser. Most students also have bound copies made for themselves and their parents, and sometimes for others.

The Thesis Grade

The thesis grade is based on a variety of factors. The quality of the thesis and the oral examination are, of course, the primary considerations. Other things being equal, a thesis involving greater research challenges may receive a higher grade. The year-long pattern of progress in working on the thesis also affects the grade, sometimes significantly. For a final thesis of given quality, a student who has worked diligently through the entire year and incorporated the suggestions received on early drafts and presentations might be expected to receive a higher grade than one whose work through the year has been less exemplary.

Off-Campus Study

Off-campus study can provide an opportunity to take economics courses that are not offered at Reed, but without advance planning it may disrupt the student's progress through the Reed curriculum. It is crucially important that economics majors who are considering study at another institution to make their plans well in advance. Advance preparation will enable you to make the most of any off-campus experience. Reed's core courses in economic theory are unique in level and scope, so economics majors should plan to fill these requirements at Reed. Taking Econ 313 and 314 as a sophomore is recommended for students who plan to be away during the junior year. This puts students in a good position to take advantage of the electives available at their off-campus study institution. Reed offers you many opportunities to study off campus, both domestically and abroad. The complete list of programs is available at <http://web.reed.edu/academic/ipo/iocs.html>. You can get more details from Paul

DeYoung at the International Programs Office in Eliot 203. Students interested in international education—as part of their major or after graduation—will find this an excellent starting point.

Interdisciplinary Majors

The Economics Department participates in two organized, “standing” interdisciplinary programs at Reed. Some students have also pursued *ad-hoc* interdisciplinary majors involving economics. The Mathematics-Economics major is for students who want to combine the study of economics with extensive training in mathematics. The International and Comparative Policy Studies—Economics major allows a student to integrate a concentration in economics with courses in other social sciences relating to international issues and the study of public policy.

Mathematics-Economics Major

The math-econ major involves a heavy concentration of coursework in both mathematics and economics. Students must take eight units of coursework in math, six units in economics, plus the two-unit thesis. (Consult the current Reed Catalog for the exact requirements.) As interdisciplinary majors, those majoring in math-econ are not subject to the distribution requirements of the Division of History and Social Sciences. Math-econ majors must pass junior qualifying exams in both the mathematics and economics departments. The thesis is normally jointly supervised by advisers from both departments and should involve substantial content from both disciplines.

The math-econ major is well suited to students who plan to attend graduate programs in economics. As discussed in the next chapter, survival in economics graduate school depends crucially on aptitude and training in mathematics. The better your undergraduate mathematics background, the less you will suffer with the math and the more you can focus on the economics as a graduate student.

International and Comparative Policy Studies (ICPS)

The ICPS program is appropriate for students who wish to combine a topical interest in international policy with a disciplinary interest in economics, political science, history, sociology, or other fields. Each ICPS major has a “home” discipline, in which he or she completes nearly all of the courses necessary for an ordinary major. In addition, each student takes substantial coursework in related disciplines to fulfill the ICPS core requirement. (See the current Reed Catalog or the ICPS student handbook for the exact requirements.) ICPS—Econ majors take seven units of non-thesis economics coursework, including the microeconomics and macroeconomics core courses required of regular economics majors. They must take the economics junior qualifying exam as well as the ICPS exam, which consists of an oral defense of

a written thesis proposal. The thesis is usually jointly supervised by faculty in the home department and a member of the ICPS committee.

Ad-hoc Interdisciplinary Majors

In recent years, students have completed *ad-hoc* interdisciplinary majors combining economics with political science, psychology, English, physics, and philosophy. Such programs must be requested by petition to both departments. The petition must present a compelling reason why the proposed course of study would not fit suitably within a single major. It should detail what coursework would be taken in both major fields and in related areas. Students should note that it is possible to take extensive coursework in other fields within a regular economics major by judicious use of electives.

The Economics Department normally requires that students proposing interdisciplinary majors take seven units of non-thesis coursework in economics, including the complete theory and econometrics core, and pass the economics junior qualifying exam. The thesis should bear a close relationship to the discipline of economics and a member of the economics faculty should be involved in its supervision.

3. ECONOMICS FACULTY

The Economics Department is currently allocated five permanent faculty positions:

Huiya (Grace) Chen, Visiting Assistant Professor of Economics. Field concentrations: International economics, industrial organization. Office: Vollum 230, x7412.

Kimberly Clausing, Associate Professor of Economics. Field concentrations: International trade, international macroeconomics, public sector economics. On leave, 2006-07.

Denise Hare, Associate Professor of Economics. Field concentrations: Economics of development, labor economics, economics of transition, China's economy. Office: Eliot 427, x7463.

Noelwah Netusil, Stanley H. Cohn Professor of Economics. Field concentrations: Environmental and natural resource economics, public sector economics, law and economics. Office: Vollum 227, x7306.

Jeff Parker, George Hay Professor of Economics. Field concentrations: Macroeconomic theory, monetary and fiscal policy, growth and technology, economics of higher education. Office: Vollum 229, x7308.

James Stewart, Thormund A. Miller and Walter Mintz Assistant Professor of Economic History and Humanities. Field concentrations: Economic history, institutions. Office: Vollum 121, x7661.

4. RESOURCES AND OPPORTUNITIES

The college offers numerous opportunities for students to learn through experiences both within and outside the normal curriculum. Although selection for most of these programs is quite competitive, students are encouraged to pursue internships, independent and collaborative research activities, and student assistantships as complements to their education. Financial support for these activities is often available through various sources within the college.

Research and Internships

Each year a number of funded opportunities are available for students to undertake individual research, to conduct collaborative work with faculty, or to engage in policy or public service work with organizations outside of the college. Some sources of funding are intended to support research that arises within the regular curriculum, including senior thesis research. Other programs are explicitly extra-curricular.

Experience in the “real-world” environment of a private or public organization also can be of great value to a student of economics. It gives you the opportunity to see what people actually do in such environments and, if arrangements work out well, to contribute to their activities. For more information about potential internship possibilities, students should consult with the appropriate faculty members and the Career Services staff.

Students who are considering projects that may require financial support should confer with relevant members of the faculty early in the planning process to assess the likelihood of obtaining support and to develop alternative plans should support not be forthcoming.

In the coming year, opportunities will likely be available through the Corbett and Goldhammer Collaborative Summer Grant, the Ducey Summer Internship, the Simpson Fund, the Initiatives Grants in Undergraduate Research, the McGill-Lawrence Internship Award, the Luce Foundation Grant, and the Freeman Student-Faculty Research Grant. Most (but not all) awards are expected to be used in the summer and their application deadlines are usually in early March. The most recent information about most of these opportunities can be found at <http://web.reed.edu/academic/studentgrants/>.

Student Assistantships

Members of the economics faculty often employ student assistants for a wide variety of tasks, including simple photocopying and filing, research assistance, help with introductory experiments, tutoring in Econ 201 or other courses, and grading homework papers. Hiring and pay arrangements for student assistants are handled by individual faculty members, not by the department. Students with Federal work-study funds may use those funds if they are hired as student assistants.

The Gerald M. Meier Award for Distinction in Economics

The Gerald M. Meier Award is presented by the Reed College Department of Economics to an economics student in recognition of outstanding achievement in the Reed undergraduate program. The Meier Award was established in 1998 by Gerald Meier, a distinguished development economist and alumnus of the Reed Economics Department.

Eligibility for the award is limited to senior economics majors, seniors in interdisciplinary majors of which economics is a part, and juniors in economics-related majors who are departing to complete a 3/2 program. Outstanding achievement may include a challenging, creative, and well-executed senior thesis, outstanding performance in economics coursework, excellence in the broader academic record, significant extracurricular work (including summer grants or internships), and other contributions to the Economics Department. Evidence of continued interest in the study of economics shall be given positive weight.

The Meier Award consists of a certificate and a \$250 cash grant to be used for the purchase of books relating to economics. It is expected that one award will be made in most years, though more or fewer may be made in some years.

Walter Mintz Economics Scholarships

Each year, a selection of junior and senior economics majors is honored through their receipt of the Walter Mintz Economics Scholarships. The Mintz scholarship fund was established in 1982 to support economics students by the late Walter Mintz, former chairman of the Reed Board of Trustees and a highly successful graduate of the Reed Economics Department. In keeping with Reed's universal policy of providing only need-based financial aid, only students who qualify for general Reed financial aid are eligible for selection as a Mintz Scholar. Selection occurs early in the fall semester.

The Simpson Fund

The Simpson Fund is managed within the economics department. The late William Simpson graduated from Reed in 1942 and went on to a distinguished academic career as an economist. Prior to his death in 1995, Mr. Simpson and his wife Ruth endowed a substantial fund to be used exclusively for the benefit of the Reed Economics Department.

The economics faculty has set aside a large share of the Simpson Fund for student support. Examples of the kinds of activities supported by the Simpson Fund in the past are acquisition of costly data for thesis use, partial reimbursement for essential thesis-related travel expenses, and fees and partial travel costs for attending or presenting research at academic conferences.

The Public Policy Workshop

The Public Policy Workshop (PPW) is a research facility available to students majoring in the Division of History and Social Sciences. It is located in Eliot 110 and contains ten computers, including five Macs and five PCs. The equipment provided represents the state-of-the-art technology supporting the most recent releases of operating systems and applications. Laser printing is also available. Applications for access to the PPW facility can be made to Karin Purdy, Political Science staff assistant, x7321. Application forms can be found outside Eliot 110.

Statistical and Econometric Software

Various academic departments at Reed maintain statistical software packages that are particularly suited to the kinds of statistical analysis common in their disciplines. Economics is no exception. In addition to the general statistical packages SPSS, SAS, and *Stata* the Economics Department has purchased *EViews*, which is specifically for econometrics.

The most commonly used statistical software for Reed economics students is *Stata*, which is used in both Econ 311 and 312. *Stata* is a general-purpose statistical package that is easier to use than SAS but has more complete capabilities for non-time-series data than *Eviews*. *Stata 9* for the Macintosh is available on the Commercial Software folder and can be run on any of the Macs in the IRC's or in the PPW.

The largest and most comprehensive available statistical package is SAS, which runs on a UNIX platform at Reed. SAS performs most of the statistical procedures that students are likely to need, but some students find it more difficult to learn than some of the other packages. The great advantages of SAS are that it will operate on

virtually unlimited numbers of observations and that it is a standard package that is used in research environments across the country. SAS runs on the UNIX server Oberon, either interactively or in batch mode.

EViews is a package that focuses specifically on procedures used by economists in the analysis of fairly small (usually time series) data sets. It is very easy to learn and is powerful enough to perform most procedures that are required. However, it maintains the user's entire data set in memory, so the number of observations and variables is limited by the amount of memory available. *EViews* will easily accommodate data sets of 1,000 or so observations with 100-200 variables. *EViews 5* runs under Windows on the PCs in the PPW.

NOTES

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IMPORTANT DEADLINES

Fall Semester, 2006

September 8	Last day to add a fall or yearlong course
September 25	Fall/spring seniors' thesis proposals due at noon
October 2	Last day to drop a fall course
October 27	First drafts of spring/fall theses due at noon
November 6	Last day to withdraw from a fall course or drop a yearlong course
December 1	Final drafts of spring/fall theses due by 3pm

Spring Semester, 2007

February 2	Last day to add a spring course
February (TBA)	Spring/fall seniors' thesis proposals due at noon
February 26	Last day to drop a spring course or to withdraw from a yearlong course
March 25	First drafts of fall/spring theses due at noon
April 2	Last day to withdraw from a spring course
April 27	Final drafts of fall/spring theses due by 3pm

IMPORTANT PEOPLE TO KNOW AND HOW TO FIND THEM

Economics Faculty

Huiya (Grace) Chen	Vollum 230, Ext. 7412
Kimberly Clausing*	
Denise Hare	Eliot 427, Ext. 7463
Noelwah Netusil	Vollum 227, Ext. 7306
Jeffrey Parker, chair	Vollum 229, Ext. 7308
James Stewart	Vollum 121, Ext. 7661

*On leave 2006-2007.

History and Social Sciences Division

Jeffrey Parker, chair	Vollum 229, Ext. 7308
Lois Hobbs, secretary	Vollum 112, Ext. 7771

Economics Librarian

Dena Hutto	Library 156, Ext. 7572
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Director of International Programs

Paul DeYoung	Eliot 203, Ext. 7290
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Career Services

Ron Albertson, Director	Johansen House, Ext. 7421
Julie Kern Smith, Assistant Director	Johansen House, Ext. 7291

All of the individuals listed above are connected to the Reed electronic mail system.