

Graduate Studies in Economics Handbook

University of Arizona
2005 Incoming Class



Table of Contents*

Program Checklist	2
Becoming a Colleague	3
Official Requirements for a Ph.D. in Economics.....	4
Normal Progress for Ph.D. Students in Economics.....	6
Additional Detail on Program Milestones.....	8
Program Teaching Requirement	8
Written Preliminary Examination.....	8
Second-Year Paper and Conference Presentation.....	8
Third-Year Paper and Conference Presentation	8
Oral Preliminary Exam and Dissertation Proposal Defense	9
Final Dissertation Defense.....	10
Organizing a Research Paper in Economics	11
Tips for Embarking on a Dissertation or Research Topic	12
The Nuts and Bolts of Going on the Job Market.....	13
You Can Do Great Things as a Graduate Student.....	14
Appendix I - Official Requirements for a Master's in Economics.....	15
Appendix II - J.D. and M.A. in Economics	16

* Please feel free to make suggestions to Prof. John Wooders or Lana Sooter to help improve the information in the Handbook.

Program Checklist

<i>First Year</i>	<i>When</i>
<input type="checkbox"/> Graduate Teaching Assistant Orientation	August
<input type="checkbox"/> Submit <i>Master's Plan of Study</i> to Grad. Degree Certification	Second Semester
<input type="checkbox"/> Pass Preliminary written examination	June/August
<input type="checkbox"/> Submit <i>Master's Completion of Degree Requirements</i> to Grad. Degree Certification	Fall or Spring of 2 nd Year
 <i>Second Year</i>	
<input type="checkbox"/> Submit <i>Ph.D. Plan of Study</i> to Grad. Degree Certification	Fall Semester
<input type="checkbox"/> Second-year paper and Conference presentation	Due in April
<input type="checkbox"/> Choose a "mentor"	Anytime
 <i>Third Year</i>	
<input type="checkbox"/> Submit the <i>Application for Oral Comprehensive Examination</i> to Grad. Degree Certification	Seven working days prior to the exam
<input type="checkbox"/> Third-year paper and conference presentation	February
<input type="checkbox"/> Submit Progress Report	February
<input type="checkbox"/> Pass Oral Examination	Spring of 3 rd Year or Fall of 4 th Year
 <i>Fourth or Fifth Year</i>	
<input type="checkbox"/> Submit the <i>Advancement to Candidacy</i> form to Grad. Degree Certification	At Least Six Months before the Oral Defense
<input type="checkbox"/> Submit Progress Report	February
<input type="checkbox"/> Prepare Job Placement Packet	October of the Job Market Year
<input type="checkbox"/> Submit <i>Announcement of Final Oral Examination</i> to Grad. Degree Certification	Seven working days prior to the exam
<input type="checkbox"/> Final Oral Defense of the completed dissertation	When Ready

Becoming a Colleague

Our fundamental program goal is to facilitate your transformation into a successful Economist. We want to move you from taking courses and tests to a position where you are developing your own projects and contributing new research to the field. By the time you complete your Ph.D., you will have made a substantial contribution to the field of Economics and prepared yourself to continue making contributions in the future.

The program is comprised of several phases. The core courses and the written preliminary exam teach you the fundamental tools of Economics. ECON 508 and the 696 seminar courses expose you to the literature in the various areas of Economics that you can study at the University of Arizona. More importantly, the major goal of the courses is to help you develop your own research program. The sequence of second-year paper and presentation, third-year paper and presentation, oral exam, and final dissertation defense are designed to provide a framework in which to develop your original contributions to the field.

The ultimate goal of making you a colleague is to help you find employment as a professional economist. We are here to aid you in achieving that goal both formally and informally. But we can only help you reach your goals. The ultimate responsibility is yours. To succeed, you will have to work hard and with a great deal of personal integrity.

Once you get past the coursework and the written preliminary exams in the first year, your success in the profession will largely be determined by your success in research. You don't get a good job based on your ability to take tests. You get a good job based on your ability to identify, develop and complete interesting research projects. From the first day in the program you should begin thinking about what types of topics interest you. Attend the afternoon workshops, get to know the faculty and other students, and learn what they are working on. The paper projects and other program milestones give you a short-term incentive to develop and finish research papers. But the papers are only as good as the amount of work and inspiration that you put into them. We can advise you and help you along the way. In the final analysis, the more you can show that you have developed good projects and are an independent economist with your own ideas and research agenda, the better our ability to recommend you to prospective employers.

The market for economists has become increasingly competitive. To obtain a job these days, you basically have to be within sight of finishing a dissertation at the time you interview at the American Economic Association meetings in early January. Even that is not enough for most positions because each employer (whether university, government or private company) receives hundreds of job applications, each with a dissertation abstract, a promise that the candidate will be done with his or her Ph.D. by the following August, a list of fields, and letters of recommendation saying the person is very good. To be successful on the job market, you need to stand out in some way. The most effective way to stand out is to already have one or two papers accepted for publication and others in the pipeline. Your best bet is to start working on research projects early in the program because it takes time for these projects to develop.

Official Requirements for a Ph.D. in Economics

Required Coursework at a Glance:

Core	24 Hours
Seminars	18 Hours
Workshops	6 Hours
Dissertation	<u>18 Hours</u>
Total	66 Hours

Core Courses:

Number	Title	Credit Hours
ECON 501a	Graduate Microeconomics I	3 Hours
ECON 501b	Graduate Microeconomics II	3 Hours
ECON 520	Statistics for Economists	3 Hours
ECON 501c	Graduate Microeconomics III	3 Hours
ECON 502a	Graduate Macroeconomics	3 Hours
ECON 522a	Graduate Econometrics I	3 Hours
ECON 508	Research Methods in Economics	3 Hours
ECON 522b	Graduate Econometrics II	<u>3 Hours</u>
Total		24 Hours

Seminar Courses:

Seminar courses are designed to expose you to literature in subfields of economics and to give you an opportunity to explore research projects in those fields. A minimum of two courses in two fields is required to promote a rich and textured understanding of research opportunities within two areas. A list of available fields follows the below example of the seminar course structure.

Field One (two courses in the same field)

ECON 696_ (or similar level)	3 Hours
ECON 696_ (or similar level)	3 Hours

Field Two (two courses in the same field)

ECON 696_ (or similar level)	3 Hours
ECON 696_ (or similar level)	3 Hours

Seminar Electives

ECON 696_ (or similar level)	3 Hours
ECON 696_ (or similar level)	<u>3 Hours</u>
Total	18 Hours

The following fields are available for Seminar Study:

- Experimental Economics (696a, 696b)
- Economic History (696x, 696y)
- Industrial Organization and Regulation (696p, 696q)
- Labor Economics (696h, 696i)
- Microeconomic Theory (696r, 696s, 696u)
- Natural Resource Economics (576, 577, see Ag Econ Dept advisors)
- Financial Economics (meet with the Finance advisor)
- Econometric Modeling (696e, 696f)
- Agricultural Economics (see Ag Econ Dept advisor.)

You may also take electives in special topics offered on an ad hoc basis. These electives could be economics courses, or courses offered by other departments such as mathematics, engineering, or psychology.

Specialization in other fields either within Economics or outside of Economics is a possibility subject to the agreement of the Director of Graduate Studies. Students interested in specializing in Financial Economics should consult the graduate director in Finance regarding coursework requirements. Similarly, students interested in specializing in Natural Resources or Agricultural Economics should meet with the graduate advisor in the Agricultural Economics Department.

Most Ph.D. students in our program do a major and minor in Economics, however you have the option of pursuing a minor in another field. The typical minor in another field involves taking a sequence of four courses and passing a minor exam. If you are interested in a minor outside of Economics then you should discuss this with the Director of Graduate Studies.

Workshops & Dissertation Credit

The workshops, designated 697 with a letter following, provide you with an opportunity to get involved in the research life of the Department. Each workshop typically meets once a week from 3:30 p.m. to 5 p.m. and features presentations by external speakers, local faculty, and graduate students. You must take at least two workshops to graduate, but students in the third year and beyond are expected to enroll in a workshop each semester. While the exact course requirements depends on the instructor, typically a student is expected to give a research presentation, write research reports on the papers of other speakers, and attend regularly. The workshops provide an introduction to the frontiers of current research and provide a forum in which the student may become comfortable presenting and discussing his or her own research. Additionally, each student must complete 18 hours of dissertation credit.

ECON 697_	Workshop in Economics	3
ECON 697_	Workshop in Economics	<u>3</u>
Total		6

Other Requirements

- Pass the written preliminary exam (theory and quantitative parts)
- Pass the second written preliminary exam in the form of the second and third-year papers
- Pass the oral examination
- Teach two undergraduate courses

Normal Progress for Ph.D. Students in Economics

First Year

You should receive grades of B or better in all of your courses, typically including: ECON 501a, ECON 520, and ECON 501b during the fall semester, and ECON 508, ECON 502a, ECON 522a, and ECON 501c during the spring semester. While the University does not use pluses or minuses in official grades, the Department tracks pluses and minuses internally. A grade of “B minus” in a course usually indicates that a student needs to do significant work to enhance his or her skills to be able to pass the preliminary examination.

Also you should participate in the graduate college assistantship training and the Economics Department’s teaching workshop (ECON 597c) in the fall and pass the accompanying teaching audition in the spring. International students must pass the SPEAK test as well.

Late in the spring semester you should submit your *Master’s Degree Plan of Study* to Graduate Degree Certification in the Graduate College. Forms are available online at the Graduate College website.

In order to continue in the program you must pass the preliminary examinations in Economic Theory and in Quantitative Methods in the summer following your first year. These exams cover the material in the first-year core courses. A student who fails an exam in June has the opportunity to retake the exam in August.

Second Year

You should perform well in the second-year coursework, typically including ECON 522b and five 696-level* seminar courses. Plus, you should choose a mentor during the fall semester to provide career advice and guidance on research projects. The goal of the student-mentor pairing is to provide you with a mentor who is well suited to your program and research agenda. We encourage students to switch mentors if they feel working with another faculty member would be more beneficial. Over the course of the year you should talk to faculty and establish contacts to develop a committee for your oral examination.

A second-year paper will be due in mid-April and should follow the structure of a journal article, describing why the topic is important, the relevant literature, the analysis, and a set of results. This second-year paper serves as the second written preliminary examination for the program. Papers will be presented during our annual second-year paper conference.

You should submit two forms to Graduate Degree Certification in the Graduate College: your *Master’s Completion of Degree Requirements*, and your *Doctoral Plan of Study*. If you have not already done so, you need to pass a teaching audition. If you have passed the audition once, you should plan on retaking the teaching audition and passing it a second time.

Note: official receipt of a Master’s degree by the end of the fall semester of your second year (or completion of thirty units in residence) can result in an increase in assistantship pay by the spring semester of that year.

* Where the term 696-level seminar is seen, courses of a similar nature and quality from other departments with different numbering systems may be taken.

Third Year

During the fall semester of your third year you should complete your final one or two 696 courses. Additionally, you should enroll in a 697 workshop in both the fall and spring semesters. In the 697 workshops you are expected to present your research to an audience of faculty and graduate students.

A third-year paper will be due in mid-February and should follow the structure of a journal article, describing why the topic is important, the relevant literature, the analysis, and a set of results. Papers will be presented during our annual third-year paper conference.

Also in February of the third year you will file a progress report that describes what you have achieved so far, including papers written, conference presentations, grant applications, courses taught, etc. The report must be read, commented upon, and signed by your mentor. You should be seeking to present your research at conferences, trying to prepare papers for journals, and seeking funding for your research agenda.

By the end of the third year or early in the fourth year, you are expected to pass an oral examination that covers the breadth and depth of the field of Economics. The oral exam in our Department typically starts with extensive questioning on the topic of your dissertation proposal and related research, and then expands over time into the fundamentals of Economics that you must know to complete your research and also to be considered a capable Economist.

Fourth & Fifth Year

A student typically completes a Ph.D. in Economics in four or five years, during which time you should continue presenting your research in the 697 workshops. In the year you plan to go on the job market you should have prepared your job market packet, including a vita, a dissertation abstract and a packet of papers by early October. You should contact the members of your committee to write letters of recommendation and to help you in your job search. You should finish the final draft of your dissertation and defend your dissertation sometime during this year. Plus, you should continue to send papers out for publication and continue to present your papers at conferences.

In February you will file a progress report that describes what you have achieved so far, including papers written, conference presentations, grants applications, courses taught, etc. The report must be read, commented upon, and signed by your mentor. The report will be used to evaluate your prospects for funding in the fifth year. Ultimately, you must accumulate 18 hours of dissertation credit before graduating.

Additional Detail on Program Milestones

Program Teaching Requirement:

We expect our doctoral students to teach at least two undergraduate courses during the program. In order to be eligible to teach you must go through the Graduate Assistants in Teaching Orientation (GATO), the Economics Department teacher training program, and pass a teaching audition. You also must pass a teaching audition a second time at some point during your graduate career.

Written Preliminary Examination

The preliminary written examination in Economic Theory and Quantitative Methods is held in early June following the first year of study. In preparation for the written preliminary examination students review all of the material from the first-year coursework. The objective of this exercise is to further ground you in the core of Economics, and to hone your understanding of the material and the connections between the concepts in the broader framework of economic reasoning.

The Economic Theory examination covers the material in the microeconomic and macroeconomic core courses (ECON 501a, 501b, 501c, and 502a). The Quantitative Methods examination covers the material in the statistics and econometrics courses (ECON 520 and 522a). Copies of previous preliminary exams are available for study. Students who fail the examination in June will have the opportunity to retake the exam in August as school is beginning.

Second-Year Paper and Conference Presentation

Students are expected to write a research paper during the second year of the program. The paper will typically be due in the second week of April. You will then present the paper to faculty and fellow students during the annual second-year paper conference.

The paper should resemble a journal article. It should describe the topic, why the topic is important, discuss the analysis, provide results, and offer conclusions. If you are writing an empirical paper, the paper should also discuss the sources of the data and contain a set of estimation results. Experimental papers should include the instructions for the experiment and the results from actual runs from the experiment. Theoretical papers should offer results, theorems, lemmas, and proofs of the results found.

Third-year paper and Conference Presentation

In February of the third year in the program students are expected to submit a third-year paper. The paper should be on a different topic from the second-year paper, although the topics of the two papers can be related. You will then present the paper to faculty and fellow students during the annual third-year paper conference.

The third year paper, like the second year paper, should resemble a journal article. Expectations are, however, significantly higher for the third year paper. You should strive to write a paper that is publishable within a couple of revisions. A prize or prizes will be awarded for the best third-year papers. Typically, these will come in the form of fellowship monies for the fourth year.

The goal of the second and third year papers is to get you started on doing original research, while offering you plenty of faculty feedback at the same time. Ideally these papers become part of a portfolio of papers that evolves into a dissertation.

The Oral Examination and Dissertation Proposal Defense

Students are expected to pass the Oral Examination during the second semester of the third academic year in the program or early in the first semester of the fourth academic year in the program.

The Oral examination committee will consist of a minimum of four voting members, all of whom are tenured, tenure-track or have been approved by the Graduate College as special members. The examination committee need not be the same as the dissertation committee. You should choose the four faculty members in conjunction with the Director of Graduate Studies and the faculty member who will chair your Oral Committee. Committees are approved by the Department and the Graduate College.

All members must be in attendance for the entire exam which should be at least one hour in length, but not exceed three hours. Students should expect the typical length to be roughly an hour and a half to two hours. In order to pass the exam, there can be no more than one negative or abstaining vote. Students who fail the oral exam will be allowed a second chance to retake the exam after three months have passed. The Graduate College allows no more than one retake of the oral exam.

The Graduate College requires that you submit the paperwork for the oral examination at least five working days before the oral examination takes place. You can obtain the forms online at the Graduate College website. In filling out the paperwork for the Graduate College, the form will ask for the date of the Comprehensive Examination. In the Economics Department the Comprehensive Exam requirement is fulfilled by the second-year and third-year papers; therefore, the official date of the Comprehensive Exam is the date on which you turned in your third-year paper. The rare student who has progressed to the dissertation stage prior to the third-year paper conference should use the date on which he or she turned in the second-year paper.

To obtain a faculty member's signature to participate in the oral exam, you must give the faculty member a copy of your dissertation proposal, copies of papers unrelated to the dissertation that you have written, and a description of your coursework at least two weeks before the proposed exam date.

The dissertation proposal should contain:

- 1) An introduction, overview, and outline of the entire dissertation.
- 2) A relatively polished chapter with results.
- 3) A second chapter that still needs more work but shows that the student is relatively far along in the research.

In the Oral Examination you are expected to show both the depth and breadth of your knowledge of the field. The typical oral examination in the Economics Department involves the following steps. You should expect to present a 10 minute overview of your dissertation proposal that briefly touches on all aspects of the thesis. To aid in answering questions, you may also wish to prepare overheads for key tables. The faculty members will have read the materials included in the dissertation proposal, so there will be no need for detailed slides on the papers. This is not a workshop presentation of the dissertation research. The format of the Oral Examination will revolve around you answering the committee's questions. The questioning starts out by focusing on your dissertation proposal and the economic issues related to the proposal. The questioning will expand to address the fundamental knowledge that you must have mastered to complete your research in the field and the general knowledge that professional economists should know.

In assessing the Oral Examination, faculty are looking to see that you are making good progress in developing your research agenda, that you have the requisite knowledge and the capability to pursue your research goals, and that you have a working knowledge of Economics. The oral exam also gives the

committee the opportunity to discuss the merits of the work already done, possible improvements to the work so far, and the remaining work to be done to complete a dissertation.

After passing the Oral Examination, you should file the *Advancement to Candidacy* form with the graduate college. The paperwork must be filed at least six months prior to your Dissertation Defense.

Final Dissertation Defense

Having filed your *Advancement to Candidacy* form 6 months prior to the Oral Dissertation Defense, you must further file the *Announcement of Final Oral Examination* with the Graduate College at least 7 working days prior to the defense date.

The dissertation committee is composed of a minimum of five faculty, including a chair, two major faculty and two minor faculty. All five faculty must agree that the dissertation is sufficiently ready for the defense. Only three of the five faculty have to attend the final defense; two of the faculty may waive attendance.

During the final defense, the Ph.D. candidate presents the dissertation to the committee members who offer comments on the material. The committee may decide that the dissertation is complete and sign the dissertation at that point, acknowledging this fact. They may decide that the dissertation needs some minor revisions that will be examined only by the chair of the committee. Or, they may decide that the dissertation needs major revisions that must be examined by all members of the committee.

Organizing a Research Paper in Economics

- *Model One: Applied paper*

Introduction – Describe the issue and why it is an important area to study.

Literature Review – Survey the existing literature on the issue and describe why your contribution extends the literature or fills gaps within the literature.

Model – Develop the model that you will use to analyze the issue and derive the implications.

Data – Describe the evidence you will use to test the model and discuss any possible problems with measurement error.

Estimation and Results – Describe your estimation procedure, report the results, and explain how well they fit or refute the model.

Conclusions – Summarize the results, explain why they are important, and what conclusions you can draw from the research.

- *Model Two: Experimental paper*

Introduction – Describe the issue and why it is an important area to study.

Literature Review – Survey the existing literature on the issue and describe why your contribution extends the literature or fills gaps within the literature.

Analytical Model – Discuss the analytical framework and predictions.

Experimental Design – Describe how the experiment will be done, with instructions and supporting documents in appendices.

Data from the Experiments and Results – Analyze the data and discuss the results.

Conclusions – Describe how the results enhance the literature and make suggestions for further research.

- *Model Three: Theoretical Paper*

Introduction – Describe the issue and why it is an important area to study.

Literature Review – Survey the existing literature on the issue and describe why your contribution extends the literature or fills gaps within the literature.

The Model – Develop the fundamental modeling framework.

Theorems, Lemmas and Proofs – Modern papers typically give intuitive descriptions of the findings, as well as more formal statements of findings in the form of theorems and lemmas, and proofs.

Conclusions – Describe how the results enhance the literature and make suggestions for further research.

Tips for Embarking on a Dissertation or Research Topic

Plunge Ahead into a Topic

Often you will start with a broad topic, narrowing your research and scope over time. Many students try to keep their options open in case they choose to switch topics in the future. While choosing another topic is an option, the only way to arrive at a solid dissertation topic is to plunge deeply into that subject.

Find a Mentor or Mentors with Interests in Your Topic

It is *extremely* important to forge relationships with faculty who share your research interests in order to aid you in the development of your topic and guide your research. They can help you identify whether a topic merits further consideration or should be disregarded in favor of other, more appropriate areas of inquiry, reducing the number of mistakes you make. When employers are evaluating our students, they pay close attention to individual faculty members' student assessments. If you capture the attention and respect of the faculty, you empower them with more tools to sell you on the job market.

Write Up Everything While You Work

At every stage of your planning, research, and analysis write up what you are working on. If you are reading articles for a literature review, summarize the articles after you read them. Find ways to tie them to the articles you have already read, and document new questions or directions to explore. If you are developing a theoretical model or a theorem, write it out formally as you go. The process of writing about your topic propels your thinking forward. Ideas that seem promising while floating around your brain may look silly once you write them down. The writing clarifies your thinking because it forces you to explain your ideas in ways that others can understand. The other major advantage of writing is that you can share what you have written with others and get much better feedback as a result.

Expect to Have to Redo Steps, Reread, and Rethink Issues

Most research requires you to backtrack at times and rethink what you are doing. Nearly all respected scholars write and rewrite articles several times before they send them out for publication, and then further revise them in response to the comments of referees.

Set Aside Specific Times that you Devote Only to Your Research

Given the long-term nature of your research you will find that short-term distractions are many. There are always other immediate deadlines vying for your attention --grading, teaching, and work at home-- will draw you away from working on the dissertation. To combat this be sure to set aside four hours a day that you devote exclusively to the dissertation. Let nothing interfere with that time. You may end up staring off into space sometimes during that period, but even that time is helping you formulate the work.

Set Short-Term Goals Related to the Research

The dissertation is a big project and seems overwhelming at the start. Take smaller portions of the project and set times that you will finish them, you may choose to do this with your dissertation advisor. Attempting to meet a deadline for each part forces you to start working on it. You may miss your deadline by a couple of days or a week, but striving to meet your deadlines will help you to finish sooner. As soon as you meet one deadline, set another goal.

The Nuts and Bolts of Going on the Job Market

Just about everything that you have been doing in the program has been preparing you for going on the Job Market. The more you can show that you have a successful and viable research agenda, the better off you will be. This includes published papers, papers submitted to journals, working papers, grants received, conference presentations given, courses taught. Remember you are going to be one of 300 or so applicants for each position, so you need to stand out in some way.

The academic market and a significant portion of the nonacademic market revolves around several institutions. The American Economic Association publishes, in hard copy and on the web, Job Openings for Economists (JOE). The openings list nearly all of the academic openings and a significant number of nonacademic openings.

The timing of the market usually centers on the Allied Social Sciences Association meetings (also known as the AEA meetings) in early January. Most job candidates typically send out several dozen job packets in response to the jobs listed in the JOE. Most schools and a number of nonacademic employers do screening interviews at the AEA meetings. You should plan to send your packets out in early to mid November, as most schools and employers begin screening the applications between Thanksgiving and December 15th. After the AEA meetings, schools and employers bring their finalists to campus for a job talk and meetings with future colleagues.

You should start preparing your job packet in September. The packet should contain a vita, which lists your name, address, citizenship, research fields, teaching fields, past employment related to economics, papers published, papers submitted to journals, working papers, grants received, refereeing done, conference presentations, and other signs of your capabilities. Also, you should have a one to two page dissertation abstract that succinctly describes the importance of your dissertation topic and your key results. You want to include at least one completed paper that shows your research skills.

You will typically need three letters of recommendation from the faculty with whom you are working. The faculty give an honest assessment of the quality of your work in these letters and describe both your strengths and weaknesses. It is important to the reputation of the Department to have you succeed in the job that you obtain. Much of what we can say has been determined over the course of your career here. If you are performing well and show all the signs of great potential, we will work hard to publicize your potential. At the other extreme, if you have been just scraping by we will have to communicate this because we do not want to get a reputation for overselling students who cannot perform in job placements.

Most schools will ask for documentation of your teaching ability. The Assistant Department Head will also write a letter of recommendation related to your teaching skills and can provide summary evidence from your teaching evaluations.

Once you know where you wish to apply, contact the faculty with whom you are working and let them know. Often, it helps to have your advisors writing emails and/or making phone calls to their friends to alert them to take another look at your packet. The Department provides funding assistance to offset the cost of mailing out your applications.

The market for nonacademic jobs in business and consulting is somewhat tied to the timing described above, but not fully tied to it. Often we find out about job openings through former students or through employers contacting the Director of Graduate Studies. We have a strong pipeline to American Express in Phoenix. We have also placed students in a variety of companies around the nation and around the world.

You Can Do Great Things as a Graduate Student

There is a tendency for students to think that publishing papers and getting grants is beyond the capabilities of a graduate student. This is patently false. Here are just some of the successes that graduate students here have accomplished during the last few years.

Publications:

Cary Deck in the *American Economic Review*, accepted in fourth year.
Bart Wilson in *Journal of Economics, Behavior, and Organization* in fourth year.
David Dickinson in *Journal of Economics, Behavior, and Organization* in fourth year.

Economic History Association Dissertation Fellowship (\$10,000)

Todd Neumann (received 2005-2006)

NSF Dissertation Grants (\$10,000):

Bart Wilson (1995-1996)
Melissa Thomasson (1996-1997)
Ryan Johnson (2000-2001)
Sam Allen (received 2003-2004)

NBER Dissertation Fellowship (\$14,000):

Nidhi Thakur (received 2003-2004)
Simona Lup (received 2004-2005)

Summer Internships in Other Places:

Bart Wilson, Federal Reserve Board of Governors
Sam Allen, National Institute for Social Insurance
Jeff Fuller and Joe Bial, Political Economy Research Center at Montana State University

Finished Thesis in Four Years or less:

A variety of people, including Clemente Hernandez, Mary Rigdon, Eric Schorvitz, Joseph Bial, Ryan Johnson, Giorgio Coricelli and Kurt Schnier. Not only did Kurt Schnier finish in four years but his dissertation "Economic Analysis of Spatially Heterogeneous Resources: the Case of the Fishery" was named the outstanding dissertation of 2003 by the American Agricultural Economics Association.

Plus, students in quantities too numerous to count regularly give presentations at leading conferences, receive University Dissertation Grants of up to \$1,000, receive Departmental Travel Grants of up to \$200 and a handful of students have received Russell Sage Foundation Grants as well.

Appendix I - Official Requirements for a Master's Degree in Economics

Students must complete 24 hours of core courses plus 6 more hours of graduate courses subject to the Graduate Director's approval. Further, students must pass a written masters examination on the core material. This exam is typically the same as the Ph.D. preliminary examination.

Core Courses:

Number	Title	Credit Hours
ECON 501a	Graduate Microeconomics I	3 Hours
ECON 501b	Graduate Microeconomics II	3 Hours
ECON 520	Statistics for Economists	3 Hours
ECON 501c	Graduate Microeconomics III	3 Hours
ECON 502a	Graduate Macroeconomics	3 Hours
ECON 522a	Graduate Econometrics I	3 Hours
ECON 508	Research Methods in Economics	3 Hours
ECON 522b	Graduate Econometrics II	<u>3 Hours</u>
Total		24 Hours

Appendix II - J.D. and M.A. in Economics

The J.D./M.A. in Economics curriculum prepares students to practice law with a substantial economics background. A minimum of 21 units of economics, plus nine units of law coursework, is required for the 30 unit M.A. in Economics. Students may transfer 15 units of Economics coursework toward the 85 units required for the J.D. With careful planning, the J.D./M.A. program can be completed in three years.

First Year

Required Courses in Economics are:

Number	Title	Credit Hours
ECON 501a	Graduate Microeconomics I	3 Hours
ECON 501b	Graduate Microeconomics II	3 Hours
ECON 520	Statistics for Economists	3 Hours
ECON 501c	Graduate Microeconomics III	3 Hours
ECON 502a	Graduate Macroeconomics	3 Hours
ECON 522a	Graduate Econometrics I	3 Hours
ECON 508	Research Methods in Economics	<u>3 Hours</u>
Total		21 Hours

Second Year

Required courses for First Year Law Students. Please reference the College of Law website:
<http://www.law.arizona.edu/>

Third Year

Finish required law courses and take Law and Economics electives.

Fourth Year

Finish electives

A minimum of 21 units of Economics plus 9 units of Legal Studies would be required for the 30-unit M.A. in Economics. You could reverse the first and second years by taking the first year of Law School before the first year of the M.A. program.