

GRADUATE PROGRAMS HANDBOOK

M.A. and Ph.D. in Economics

Fall 2016

DEPARTMENT OF ECONOMICS

**Haslam College of Business
The University of Tennessee**



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Welcome

Welcome to the graduate program in economics at the University of Tennessee. Our department has many things to be proud of, and our graduate program is high on that list.

During your graduate student career you will undergo many transitions. The first will become apparent the very first day of class, when you stop thinking about economics in terms of graphs and instead think about economics through either mathematical or statistical analysis. You will stop taking tests and begin writing papers, and you will stop sitting in classes and instead begin teaching them. Best of all, though, you will stop merely learning about existing knowledge but will begin creating new knowledge, and this is what makes graduate school truly exciting.

Many students go through undergraduate programs trying hard not to stand out. Your goal in the graduate program is to stand out and make the faculty notice you, and good exam grades will probably not suffice. You need to work harder than everyone else and be visible. The faculty values students who show an “intellectual fearlessness” and so it is better to ask questions or give wrong answers than it is to simply listen. In the long run your success will depend on your interactions with the faculty who direct your dissertation or thesis. Standing out leads to better opportunities because standing out makes the faculty find you, and not the other way around.

The department will provide you with many opportunities to advance your career and make yourself better. Please take advantage of these opportunities. You will have the opportunity to learn about research from scholars from other universities through the Greer Seminar series, and you should attend. You will have the opportunity to present your own research at the Brown Bag seminar, and you should do so. You may have the opportunity to assist faculty in research, and taking advantage of this opportunity means requesting more work rather than trying to do as little as possible. You will have the opportunity to teach if you meet the qualifications to do so, and you should fulfill those qualifications to be able to add this important skill to your resume.

The graduate program turns out to be both great fun and a tremendous amount of work. I have no doubt that you will enjoy your time here despite the many stresses we impose on you. You are now part of a wonderful community – the Department of Economics – and we look forward to having you become one of us.



William Neilson
Department Head
March 2013

1. Introduction

This Handbook is written for prospective and current Graduate Students in the Department of Economics at The University of Tennessee, Knoxville. The department offers programs leading to the M.A. and Ph.D. in Economics. The *Graduate Catalog* and *Hilltopics*, both of which can be accessed via the department's web site (<http://econ.bus.utk.edu/>) and the publications on the Appeals Procedure and the Graduate Assistant Handbook available on the Graduate School website (<http://gradschool.utk.edu/graduate-student-life/>), are other publications that provide important information about the graduate student policies of the university. Graduate students are responsible for knowing and abiding by the various department and university policies. This handbook lists *minimum* requirements and expectations concerning completion of graduate degree programs. Experience suggests, however, that the most successful graduate students will strive to go above and beyond these minimum requirements in the pursuit of becoming a well-rounded professional economist.

This handbook is revised on an annual basis, and students in the program are strongly urged to consult the most recent version on the handbook. While changes in degree requirements generally only affect incoming students, policy and procedural changes apply to all students in the program.

A Message from the Graduate School

In order to serve the mission and vision of the Graduate School and preserve the integrity of Graduate Programs at the University of Tennessee, Knoxville, information related to the process of graduate education in each department is to be provided for all graduate students.

Based on Best Practices offered by the Council of Graduate Schools, it is important that detailed articulation of the information specific to the graduate degrees offered in each department/program be disseminated.

The Department Graduate Handbook does not deviate from established Graduate School Policies noted in the Graduate Catalog (<http://catalog.utk.edu/index.php?catoid=19>), but rather provides the specific ways in which those policies are carried out.

2. Admission Requirements and Application Procedure

Admission to the Department of Economics is an online process administered by the UTK Graduate Admissions office. For international students, graduate admissions applications are due by February 1 for consideration for Fall semester admissions. Although there is no formal deadline for domestic students, it is strongly recommended that all students fulfill all application requirements by February 1. Those who submit by this date will be given full consideration for both admissions and financial support.

2.1. Graduate admissions

The admissions process is administered online through the Graduate School (<http://graduateadmissions.utk.edu/>). A completed Graduate Application for Admission includes: non-refundable application fee; transcripts from all colleges and universities attended; Graduate Record Exam (GRE) or Graduate Management Admission Test (GMAT) scores; Test of English as a Foreign Language (TOEFL) or IELTS scores, if native language is not English; three letters of recommendation; and answers to supplemental questions from the Department of Economics. To determine admissions, it is acceptable for applicants to obtain official copies of transcripts and scan/upload them into the application. Test scores can further be self-reported. Applicants granted admissions will be asked to have official transcripts and test score reports sent directly from the institutions to the Graduate School prior to enrollment.

Admission to graduate study requires a bachelor's degree with a satisfactory grade point average from a college or university accredited by the appropriate regional accrediting agency or foreign equivalent. United States degree holders must have earned a minimum of 2.7 out of a possible 4.0 GPA or a minimum of 3.0 during the senior year of undergraduate study. If you have completed previous graduate coursework, you must have earned a minimum of 3.0 out of a possible 4.0 GPA. Applicants with non-U.S. degrees must have earned a minimum of 3.0 on a 4.0 scale or other equivalent to a 'B' average. If you have completed previous graduate coursework, you must have earned a minimum of 3.3 out of a possible 4.0 GPA or other equivalent to a 'B+' average.

All non-native speakers of English are required to take either the TOEFL (Test of English as a Foreign Language) or the International English Language Testing System (IELTS). To be fully admitted by the Graduate School, applicants must submit a minimum score of 550 on the paper-based TOEFL; 80 on the TOEFL iBT or 6.5 on the IELTS. Applicants who have received a degree from an accredited US institution within two years prior to enrollment are exempt from the TOEFL or IELTS requirement.

2.2. Department admissions

All information relevant for admissions is collected through the Graduate School application; i.e., there is no additional application required by the department for either admissions or funding consideration. The application does include targeted questions related to their preparation for graduate studies in economics, fields of interest, and career goals. Answers to these questions are an important part of the evaluation process. In addition, admissions and funding decisions are based on completed coursework, undergraduate (and, if applicable, graduate) academic performance, GRE (GMAT) scores from all test sections, and recommendation letters.

Although a bachelor's (or master's) degree in economics is not required, students should be well-prepared for graduate coursework in economics. It is strongly recommended that applicants have completed or plan to take the following courses prior to enrollment (planned coursework should be indicated in the application):

Intermediate Microeconomic Theory (ECON 311 or equivalent)
Intermediate Macroeconomic Theory (ECON 313 or equivalent)
Introduction to Econometrics (ECON 381 or equivalent)
Introduction to Statistics (STAT 201 or equivalent)
Calculus I & II (MATH 141 & 142 or equivalent)
Matrix Algebra I (MATH 251 or equivalent)

Additional coursework in economics, statistics and mathematics is of course desirable.

Admissions are determined by the Graduate Admissions Committee, which generally consists of the Graduate Director, Department Head, and two members of the Graduate Committee.

Information from Fall 2016 admissions decisions appears below.

Acceptance rate: 35%

Number of funding offers: 16

Number enrolled: 7

Mean GPA (admitted only): 3.6 undergraduate, 3.7 graduate

Mean GRE – Quantitative (admitted only): 85th percentile

Mean GRE – Verbal (admitted only): 69th percentile

Students may be admitted to the M.A. program and later be admitted into the Ph.D. program. Such a change in admission status is at the discretion of the Department. Students may also be admitted directly into the Ph.D. program after completion of either a bachelor's or master's degree.

Students who seek admission to either the M.A. or Ph.D. programs may be admitted as degree-seeking students or may be given provisional admission. Those who are provisionally admitted must work closely with the Graduate Director in selecting courses, the satisfactory completion of which will result in admission to the program. Stipulation of courses to be taken may be made at the time of provisional admission.

2.3. English language proficiency

All international students, except those whose native language is English, are required to take the ACTFL Oral Proficiency Interview by Computer Test (OPIc), which is a standardized, global assessment of functional speaking ability. This test is mandatory and is administered by the university. Incoming students take the test in August, prior to the Fall semester. It tests for the English skills that are required of teaching assistants and associates. (See requirements for teaching assistantships below.) Admission to the program does not depend upon the results of the OPIc. Test results will be used in advising, coursework determination and in making work assignments. Students on assistantship are required to pass the OPIc at a level that allows them to serve as teaching assistants (score of AM – “Advanced Mid”) by the end of the second semester of studies as a requirement for continued funding. Authorization to have sole responsibility to teach a course requires a score of “Advanced High”, and thus students are strongly encouraged to reach this level of proficiency.

In addition, all international students, except those who have earned a bachelor's degree from a U.S. institution, are required to take the English Placement Exam. This exam is administered in August, prior to the Fall semester of initial enrollment. Those students needing additional instruction in English composition, as suggested by the exam results, are placed into an English composition course designed specifically for new graduate students.

3. Financial Support

Students in the graduate program may be awarded assistantships or other financial aid. Awards are made by the Department Head on the recommendation of the Graduate Committee. Initial awards are highly competitive. Maintenance of financial aid is contingent on students maintaining a high academic standing, good work performance in their assigned duties and active involvement in the program. Although financial support cannot be absolutely guaranteed beyond the initial year of award, virtually all continuing students in good standing receive financial support for the five-year program of study. It is policy not to fund students beyond the fifth year.

3.1. Graduate assistantships

The Department awards a number of graduate assistantships. Those on assistantship are assigned as graduate teaching assistants (GTAs), graduate research assistants (GRAs) or graduate teaching associates (GT Associates). These assignments are essential complements to the students' program of study. GTAs typically assist faculty in teaching large sections of introductory economics or graduate core courses. Those assigned as GT Associates are extended the opportunity of teaching their own undergraduate course. Most students serve as GTAs in the first two years of the program, and then alternate between GTA, GRA and GT Associate assignments depending on department needs and student interests.

A number of highly attractive GRA positions are available outside the Department, working under the supervision of Departmental faculty or other professional economists. The department has strong ties to the Boyd Center for Business and Economic Research, which engages in forecasting and applied public policy research, and the Howard H. Baker Jr. Center for Public policy, which focuses on issues of global security and environmental policy. Both of these centers employ several of our students each year. Most GRAs in these centers enter the program on a department assistantship.

Although less frequent, in recent years, students have also been funded by the UT Center for Transportation Research, the Construction Industry Research and Policy Center, and the Department of Agricultural & Resource Economics. A partial listing of other available open assistantships is posted on the Graduate School website.

The *Faculty Handbook* describes four categories of assistantships:

Graduate Teaching Assistants work under the direct supervision of a regular faculty member in activities such as helping to prepare lectures, teaching discussion sections, conducting laboratory

exercises, grading papers and keeping class records. In consultation with the supervisor, the Teaching Assistant works to gain teaching skills and an increased understanding of the discipline. Appointments are normally on a one-fourth to one-half time basis (i.e., 10 to 20 hours per week), and the annual stipend is payable in twelve monthly installments. The assistantship is accompanied by a tuition waiver (see below) for the period of appointment in accordance with university policy.

Graduate Teaching Associates are exceptionally experienced graduate students who are assigned primary responsibility for teaching undergraduate courses, including the assignment of final grades. The Teaching Associate usually carries one-fourth to one-half of a normal teaching load. The annual stipend is payable in twelve monthly installments.

Graduate Assistants are appointed primarily to perform various types of duties other than teaching. Any assigned instructional activity is conducted under careful supervision. The annual stipend is payable in twelve monthly installments. The assistantship is accompanied by a tuition waiver for the period of appointment in accordance with university policy.

Graduate Research Assistants are generally funded through gift, grant, or contract funds. Students holding such appointments pursue a work and study program like that expected under the other types of awards. Graduate research assistantships are accompanied by a tuition waiver for the period of appointment in accordance with university policy.

The salary for first year assistantships of all four types is the same; for each year through the fourth year there is normally an annual increment that is based on UT system raises. The waiver of fees for assistantships applies to maintenance and tuition fees only; it does not include other fees (e.g., activity fee, library fee, etc.).

- Those who hold assistantships should have no outside employment. GTAs should not be paid as tutors for any sections of courses that they teach. Extra service pay may in rare cases be authorized for work above and beyond the 20 hours required of graduate assistants but such authorization will be for limited purposes only. Students who are on an assistantship are required to seek prior approval from the Graduate Director before pursuing additional work for compensation.
- Students in good standing may apply for graduate teaching and other assistantships for the summer. Compensation for summer work will be in addition to the academic year assistantship. Summer teaching will be assigned to graduate students on the basis of academic record and seniority, prior teaching evaluations and involvement in the graduate program. The availability of summer teaching opportunities is limited by student demand for undergraduate courses and financial resources.
- Graduate assistantships are normally awarded for one academic year, with renewal subject to degree progression and other requirements. In some cases, assistantships may be awarded for one semester only. This is specified at the time of appointment. The Head of the Department, or the Graduate Director acting on their behalf, is responsible for notifying the graduate assistant of reappointment or non-reappointment as early as possible. In cases of significant

neglect of duty or non-compliance with university policies an assistantship may be terminated during the academic year (or semester) for which the student has been appointed. In such cases the graduate assistant will be notified in advance. In most cases, this advanced notice must be given no later than one month prior to the end of the appointment. Specific reasons why the appointment will not be continued must be given. Graduate assistants' rights and responsibilities are defined in the *Faculty Handbook* section on Students Rights and Responsibilities and the Student Rights and Responsibilities section of *Hilltopics*.

- As specified in the *Personnel Policies and Procedures Manual* (Section 100 105-Pr3, p. 2), "A student employee is one whose primary function is that of enrollment in an academic program." Thus, first priority of all graduate assistants should be satisfactory progress in their scholastic program. At the same time, however, acceptance of assistantships is predicated on the belief that satisfactory work can be concurrently performed in work assignments and scholastic programs. Collaborative efforts between graduate assistants and their supervisors should be focused on the goal of satisfactory performance in both of these areas. In cases where graduate assistants feel that they have a legitimate complaint about any aspect of carrying out their assignments (work hours, duties assigned, pay, work conditions, etc.), they have a right to exhaust all channels to resolve the conflict. In the order that follows, the student should speak to her/his immediate supervisor, the Department Head, and then the Dean of the Haslam College of Business. If the student feels that a resolution should be sought beyond the department/college level, the Graduate School should be contacted. The Graduate School will follow established procedures outlined in the Graduate Council Appeals Procedure and/or *Hilltopics*.
- Graduate assistants' fringe benefits as employees of The University of Tennessee, in addition to fee waivers as explained elsewhere, include workers' compensation as defined in the *Personnel Policies and Procedures Manual* under employees' status. The specific wording reads, "Employees so designated [as student employees] receive no benefits other than statutorily required payments which include Workers' Compensation." (Section 100 105-PR2-3.) Graduate students are also entitled to enrollment in a group health insurance plan offered by the university.

3.2. Scholarships, fellowships and grants

A limited number of PhD Scholarships each year are awarded to incoming students. Current scholarships include the Chancellors Scholarship (currently funded at \$10,000 per year), Haslam Doctoral Scholarship (\$5,000 per year), and Howard Baker Doctoral Scholarship in Energy and the Environment (\$5,000 per year). These awards are cost-shared between the department and other units, and supplement department assistantships although no additional work is required.

For continuing students, the department currently offers a number of fellowships and awards on an annual basis. These are described briefly below:

- J. Fred and Wilma Holly Fellowship for Excellence in Research: awarded for the best second-year research paper.
- J. Fred and Wilma Holly Fellowship for Published Research (repeatable): awarded for the best publication in a refereed economics journal.

- J. Fred and Wilma Holly Fellowship for Best First-Year Graduate Student: awarded for the best performance in first-year coursework and qualifying exams.
- Charles B. Garrison Award for Excellence in Teaching (repeatable): awarded to best graduate student teaching associate.
- Charles B. Garrison Award for Best Graduate Assistant (repeatable): awarded to the best graduate student assistant (GRA, GA or teaching assistant).
- J. Fred and Wilma Holly Award for Excellence in Presented Research (repeatable): awarded for the best presentation in a Department seminar.

Additional fellowships, scholarships and awards are available through the university.

3.3. Travel and research support

The department provides partial support for travelling to professional meetings and workshops. In order to take advantage of the support available through the Graduate Student Senate (GSS) Travel Fund, the deadlines for applying for department travel support are typically 2 weeks prior to the GSS deadlines. Department travel awards are made by the Graduate Committee. Students must fill out a travel award application (available from the Graduate Director) to be considered for travel funding. Travel award applications are reviewed three times a year: in August for Fall semester travel; in December for Spring semester travel; and in April for Summer travel. Travel award applications are not needed for job market candidates attending the ASSA meetings.

In addition to department and GSS support, the Haslam College of Business matches department awards, up to \$300. Although the department may provide travel support for multiple conferences within the same academic year, support from the GSS and CBA is limited to one trip per academic year.

The department entertains travel requests in situations where the student wishes to attend a conference or workshop without the purpose of presenting research. This is especially true for prestigious workshops, such as the Lindau Nobel Laureate meetings. Support by the GSS and HCB is available only for those travelling to present research.

The department provides travel support for job market candidates to engage in job screening interviews at the Allied Social Sciences Association (ASSA) annual conference in early January. To receive this support, candidates must have presented their job market paper in a department seminar and defended their dissertation proposal. A travel award application is not required.

To receive reimbursement for travel expenses, students must have their travel plans entered into the university system. This is coordinated through the Graduate Program Assistant.

Modest support for research endeavors is available from the department. Prime examples include funding laboratory experiments, surveys, and purchasing proprietary data and specialized software. Applications are accepted by the Graduate Committee, on a rolling basis. Graduate students may obtain financing from the Graduate School, from the College, or from the department to support research. The Office of Financial Aid & Scholarships administers various

sources of financial support, including Federal Stafford loans, Federal Perkins loans, GRAD PLUS loans, and loans through private lending institutions. Students interested in this form of support are directed to <http://onestop.utk.edu/financial-aid/>.

Preference for travel and research awards made by the department will be given to those students who are active in research and participate in department seminars. There are limits to the amount any particular student will be awarded.

4. Guidelines for Students on Assistantships

4.1. Minimum requirements for continued funding

Selection as a graduate assistant and continuation of appointment are based upon an expectation of satisfactory performance as a graduate student, satisfactory execution of assigned duties as an assistant and active involvement in the activities of the department and graduate program.

Students should not view assistantships as an entitlement, but instead embrace them as opportunities for professional development. In this regard, the department has established the following specific minimum guidelines for assistantships. Students employed as research assistants for units outside the department (e.g. Boyd Center for Business and Economic Research) are usually subject to these same requirements.

- Students are expected to work the number of hours consistent with the level of funding. For students with half-time (0.5 FTE) appointments, the expectation is 20 hours per week. For students on quarter-time (0.25 FTE) appointments, the expectation is 10 hours per week.
- Continued appointment requires registration for at least 9 credit hours each semester of the academic year, unless permission has been granted by the Graduate Director. For first and second year students, the 9 credit hours should be devoted to coursework at the 500 level or above. Students generally begin registering for dissertation credits (ECON 600) their third year. However, subject to Graduate Director approval, students actively engaged in research may begin enrolling in ECON 600 during their second year.
- All teaching associates and assistants who are teaching are required to use UT teaching evaluation questionnaires. Satisfactory evaluations are required for continuation of assistantships.
- All graduate assistants will be evaluated by those who supervise their work at the end of each semester. A rating of “meets expectation” is typically required for continuation of assistantships.
- All teaching associates and assistants who are teaching should meet all classes as scheduled. If it is absolutely necessary to miss a class, teaching assistants should notify the faculty with whom they work and arrangements should be made for another teaching assistant to

substitute. Graduate teaching associates should notify the Department Head and discuss arrangements made. All classes missed must be reported.

- GTAs, regardless of whether engaged in classroom instruction, must attend all course lectures. The lone exception to this is when the lecture time conflicts with a graduate economics course the teaching assistant is taking.
- Maintenance of a GPA in economics graduate courses at the 500 level or above of at least 3.25 is generally required for continuation of appointment. If a student's GPA falls below 3.0 for the academic year the student will lose funding. Funding may be reinstated at a later date if the student's cumulative GPA returns to 3.25 or better.
- Students whose native language is not English must take the OPIc exam. Those who do not pass the OPIc with a score of Advanced High, by the end of the Spring semester of the first year of studies, are not guaranteed continued departmental funding. Those who do not score at least Advanced Mid by the end of the Spring semester of their first year are ineligible for second year funding. Funding may be reinstated at a later date if the student subsequently passes the OPIc with a score of Advanced High.
- Ph.D. students must pass (at the Ph.D. level) the micro and macro theory qualifying examinations in the summer following their first year of studies to be eligible for second year funding.
- Ph.D. students must pass the second-year paper requirement by May of the third year of studies to be eligible for fourth year funding.
- Ph.D. students must pass the dissertation proposal defense by July 15th of the summer term concluding their fourth year of studies to be eligible for fifth year funding.

4.2. Evaluation and mentoring of teaching associates

GT Associates have the special opportunity to teach their own courses. To help prepare for this challenge, as well as maintain the quality and consistency of regularly offered courses, each undergraduate course has a faculty mentor associated with it. The mentor assigned to a course will be responsible for supervising any graduate student teaching the course, unless other arrangements have been made. The responsibility of the course nevertheless lies with the student.

Shortly after being notified of their assignment, GT Associates should meet with their faculty mentor. The course textbook(s) are chosen by the faculty mentor, unless the student and mentor agree to adoption of alternative textbook(s). Prior to the start of the course, the syllabus and related course content must be approved by the faculty mentor. In addition, the mentor is expected to attend the course at least once during the semester and provide feedback to the student. In the event that the mentor identifies significant improvement is needed, the mentor should attend a second time. Aside from these established practices, GT Associates are encouraged to seek guidance from the faculty mentor, and other faculty, as needed.

5. Requirements for the Doctor of Philosophy Degree (Ph.D.)

Requirements for the Ph.D. in Economics are given in this section. Note that these are minimum requirements, and apply to full-time students. For part-time students, the timing of requirements will be determined by the Graduate Director on a case-by-case basis. As the Ph.D. is preparation for a career as a professional economist, students may find it valuable to take complementary courses in mathematics, statistics, analytics, finance, agricultural & resource economics, or other areas. Students will also find it valuable to regularly attend and participate in department seminars and brown bag workshops.

All students should work closely with the Graduate Director and other faculty in selecting courses to satisfy the requirements for the Ph.D. Those students who enter the program with an M.A. (or other graduate work) from another school will need to work with advisors to determine how much of that work can be applied toward the UT requirements. The final decision on such matters will rest with the Graduate Director and the Graduate Committee.

5.1. Course requirements

The general requirements for completion of the Ph.D. include core coursework, at least two fields of specialization, electives, and dissertation credits.

Required Coursework at a Glance:

Core	21 Hours
Fields of Specialization	12 Hours
Economics Electives	6 Hours
Graduate Electives*	9 Hours
Dissertation	<u>24 Hours</u>
Total	72 Hours

* This requirement does not apply to those students who have completed a master's degree prior to enrollment in the Ph.D. program.

Core Courses: Students are required to complete core sequences in microeconomic theory, macroeconomic theory, and quantitative methods. The core courses are as follows:

Number	Title	Credits	Semester
ECON 581	Mathematical Methods in Economics	3	Summer / 1 st Year
ECON 511	Microeconomic Theory I	3	Fall / 1 st Year
ECON 513	Macroeconomic Theory I	3	Fall / 1 st Year
ECON 582	Elements of Econometrics I	3	Fall / 1 st Year
ECON 512	Microeconomic Theory II	3	Spring / 1 st Year
ECON 514	Macroeconomic Theory II	3	Spring / 1 st Year
ECON 583	Elements of Econometrics II	<u>3</u>	Spring / 1 st Year
Total		21 Hours	

Students must complete ECON 581 with a grade of B or better; and complete ECON 582 and ECON 583 with a GPA of 3.0 or better, or by qualifying examination. NOTE: ECON 581 begins in early August, prior to Fall semester courses. Incoming students should plan accordingly.

Fields of Specialization: The department offers five fields of specialization. Students are required to complete at least two fields of specialization, and are encouraged to take courses in other fields or through other departments in order to fulfill credit hour requirements. Available fields and required courses are as follows:

- Behavioral & Experimental Economics – ECON 611, 612
- Environmental Economics – ECON 677, 678
- Industrial Organization – ECON 631, 632
- International Economics – ECON 621, 622
- Public Finance – ECON 671, 672

Successful completion of a field of specialization requires: (1) a GPA of 3.25 within the field; and (2) a minimum grade of B in each course.

Electives: Students are required to complete with a grade of B or better two elective courses in economics at the 500 level or above, outside the core subject areas and outside the two chosen fields of specialization. Students must also complete a sufficient number of graduate electives (in economics or other fields) to bring their total hours of coursework to 48 hours beyond the bachelor's degree or 24 hours beyond the master's. Economics course offerings outside of the core and fields of specialization vary from year to year based on faculty and student interests. Courses that are routinely offered include:

- ECON 682 Advanced Topics in Cross-Section Econometrics
- ECON 683 Time Series Econometrics

Dissertation: Students must also complete at least 24 hours of ECON 600 (Dissertation), and students must continually register for at least 3 credits of ECON 600 in all subsequent terms after the first hours of ECON 600 are completed, including the summer term.

Registration for Use of Facilities: In the summer term, students who are not taking coursework and are not yet eligible to register for thesis or dissertation hours, should register for 1 credit of ECON 502 if they wish to have borrowing privileges in the University Libraries or to use computer labs, other labs, or other university resources.

5.2. Qualifying examinations

Students must demonstrate proficiency in economic theory by successfully passing the microeconomic theory and macroeconomic theory qualifying exams. Students must sit for these examinations in the early summer immediately following their first year of study. To sit for the examinations, students must first complete the relevant coursework in the core (ECON 511, 512, 513, 514) or petition the Graduate Committee for exemption from these courses. Students who fail one or both of these qualifying examinations will have a second opportunity to pass them in late summer before the beginning of the second year in the program. Copies of past exams are available upon request.

Students who do not pass one or both exams on the first attempt are strongly encouraged to discuss the exam with faculty serving on the examination committees. Students can receive a copy of the exam questions but are not allowed to have back their own answers to the exams.

NOTE: Students failing any qualifying examination must retake the examination the next time it is offered. Failing a qualifying examination for the second time will ordinarily result in dismissal from the program. However, a qualifying examination may be taken a third time with approval of the department. Students must file a petition with the Graduate Director who will convene the Graduate Committee to consider the merits of the petition. Extenuating circumstances are generally needed to warrant approval to sit for a third examination. Failing a qualifying examination for a third time will result in dismissal from the program.

5.3. Second-year research paper

Students write a second-year research paper, on a topic of their choosing, as part of the degree requirements. The submission deadline falls at the end of July during the second year of study. Students who do not pass upon their first submission, which includes students who fail to meet the deadline, must submit a suitable paper (revision) by a November deadline of the same calendar year. Students who have made sufficient progress are urged to submit their papers prior to the deadline(s). However, students with early submissions will not be given special consideration in the evaluation process (e.g. they will not be granted additional attempts to pass).

Students failing to pass the requirement by May of the third year of study will generally be dismissed from the program. However, as with all other rules and policies governing the graduate program, a third opportunity may be granted upon successful appeal to the Graduate Committee. Students must file a petition with the Graduate Director who will convene the Graduate Committee to consider the merits of the petition. Extenuating circumstances are generally needed to warrant approval for a third opportunity. Failing the paper requirement for a third time will result in dismissal from the program.

Students are encouraged to work with and discuss their papers with faculty members. Indeed, prior experience suggests that early and frequent interaction with faculty members is vital to passing the paper requirement. Similar to a paper appearing in a thesis or dissertation, faculty members may be co-authors but the student must be the primary author. In the event of collaborative work, it is important that the student take responsibility for all aspects of the writing and analysis (theoretical and empirical).

Second-year papers may stem from coursework, for example a proposal or draft paper assignment. One proven (and efficient) path to success is to take seriously research-related assignments in courses and then fully develop one paper idea/proposal/draft to fruition.

Students should begin discussing possible paper ideas with faculty members soon after entering the program. Presentations in brown-bag seminars or other venues are also strongly encouraged before submission of the paper. To encourage these activities, submitted papers must include a cover sheet with names of faculty members who have advised or mentored the project and/or who have read prior drafts, and a listing of dates for prior brown-bag or other presentations of the

research. Submitted papers with no faculty members listed or no prior presentations will have a lower probability of meeting the requirement.

Research papers will be evaluated by a committee of faculty members designated by the Department Head. An acceptable paper is one that is well-motivated, addresses an important issue, meaningfully contributes to the research literature, and is complete. In contrast, failing papers have tended to be ones that are difficult to understand, make no contributions to the body of knowledge, include unproven propositions, have serious empirical or theoretical flaws, or incomplete analysis. An acceptable paper need not be a long paper. Suggestions for organizing the second-year paper appear below.

Applied Paper

- Introduction – Describe the issue and why it is an important area of 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.
- (For an experimental paper) Experimental Design – Describe how the experiment will be done, with instructions and supporting documents in appendices.
- Data – Describe the evidence you will use to test the model and discuss any possible problems with measurement error. Sufficient information should be provided to allow for replication.
- Empirical Methods and Results – Describe your estimation procedures, perform robustness checks, and report the results.
- Conclusion – Summarize the results, explain why they are important, and what conclusions you can draw from the research.

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/Propositions, 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.
- Conclusion – Describe how the results enhance the literature and make suggestions for further research.

5.4. Admission to candidacy

Admission to candidacy must be applied for and approved by the doctoral committee and by the Graduate School at least one full semester prior to the date the degree is to be conferred. To be admitted to candidacy all incompletes in courses must be removed and a B average in all graduate course work must have been achieved. Each student is responsible for filing the admission to candidacy form (see Appendix B).

5.5. Dissertation

Students complete a doctoral dissertation and defend it successfully before the faculty. Normally, dissertation research will be done in one of the two (or more) fields in which the student has established competence as described above, but this is not required. The student is responsible for selecting a major professor (i.e. dissertation supervisor, who will often be the faculty advisor) and in consultation with the major professor should select a dissertation committee. The committee must include at least four faculty members who hold the rank of Assistant Professor or above. Three of the committee members, including the major professor, must be approved by the Graduate Council to direct doctoral research. At least one member of the committee must be from a department other than economics. This committee must be approved by the Department Head and by the Graduate School. With the approval of the Department Head, an external advisor from another college or university may be invited to join the committee. The department will assume the cost of bringing the advisor to campus for the defense of the dissertation.

Following approval of the committee, the student should submit a written dissertation proposal to all members of the committee. The major professor will then work with the student to arrange an oral defense of the proposal. Dissertation proposals may vary considerably in length and complexity. Some may be relatively brief plans for research to be undertaken; others will be longer and more detailed accounts of work already underway. The student and the supervisor should determine at what stage the proposal is to be presented to the dissertation committee. However, in all cases students should consult regularly with their committee about their progress in formulating a defensible proposal. Failure to do so may result in loss of continued financial support (see below).

The dissertation proposal should normally be defended within a semester following the successful completion of required course work. Ideally, students will defend their proposal prior to the fourth year of study.

Successful defense of the dissertation itself should normally take place within 12 months following the defense of the proposal. Defense of the dissertation takes the form of an oral examination which all members of the dissertation committee must attend and to which all members of the university community are invited. The final draft of the dissertation must be distributed to all committee members at least two weeks prior to the date of a final oral examination which should be scheduled in accordance with Graduate School requirements. The dissertation itself must be prepared according to the regulations in the *UT Guide to the Preparation of Theses and Dissertations*. A bound copy must be presented to the department. Tradition also dictates that additional copies are given to members of the dissertation committee.

Students are strongly encouraged to periodically consult with all members of their committee, and not simply their dissertation supervisor. History suggests that less involved committee members tend to raise serious concerns during proposal and dissertation defenses, and this can lead to unanticipated delays. Just as important, good suggestions from committee members may come too late to be valuable to the research.

5.6. Recommended progress for completion of degree

The Ph.D. program is designed so that students can realistically complete the degree in five years or less. We have had students complete the degree in four years and, on occasion, three years.

First Year

- Complete core coursework (511, 512, 513, 514, 581, 582, 583)
- International students must pass the OPIc.
- Pass the micro and macro theory qualifying exams in the summer.
- Attend regularly the department's Brown Bag workshops and Greer seminars.
- At the end of summer, and prior to the Fall semester of the second year, students wishing to earn an M.A. submit to the Graduate School the relevant forms (see Appendix B).

Second Year

- Take at least 18 credits, with 9 credits recommended in the fall and 9 credits in the spring. This should include two or more courses in the desired fields of specialization. Most students also take one or both of the advanced econometrics courses (ECON 682, 683).
- Take the teaching preparation seminar (BUAD 610), which is offered in the summer mini-term, if you intend to teach your own courses. This is required for those on a department assistantship.
- Speak to faculty about research, and choose an advisor by the end of the Spring semester.
- Attend regularly the department's Brown Bag workshops and Greer seminars.
- Consider presenting research at Brown Bag workshop.
- Successfully complete the second-year paper in the summer.

Third Year

- Complete fields of specialization and other relevant coursework. Take at least 9 credits each semester, which will usually include dissertation credits.
- Establish dissertation committee.
- Defend dissertation proposal.
- Attend regularly the department's Brown Bag and Greer seminars.
- Present research in our Brown Bag seminar and at professional conferences.
- Begin submitting papers for publication consideration.

Fourth/Fifth Year

- Submit job market packet and complete job market paper by late summer or early fall.
- Contact members of dissertation committee to write letters of recommendation and help you in your job search.
- Present job market paper in a Greer seminar in the fall.
- Defend dissertation.
- Continue to send papers out for publication.
- Present research at professional conferences.
- Submit all forms related to graduation (see Appendix B).

6. Requirements for the Master of Arts Degree (M.A.)

A student may choose either the thesis or non-thesis option for the M.A. The thesis option requires 30 hours of course work at the 400 level or above, including at least 24 hours at the 500 or 600 level (no more than 6 hours of which may be thesis hours). Of the remaining 18 hours at the 500 level or above, at least 15 must be in economics and must include 511-12 and 513-14. A maximum of 6 hours may be in an area other than economics.

Students who choose the thesis option should select a faculty advisor who will serve as major professor of the thesis committee. In consultation with the major professor, two additional faculty members at the rank of assistant professor or above should be asked to serve on the committee. The final draft of the thesis must be distributed to all committee members at least two weeks prior to the date of a final oral examination which should be scheduled in accordance with Graduate School requirements. The thesis must be prepared according to the *UT Guide to the Preparation of Theses and Dissertations*. One copy of the thesis should be given to the department. Traditionally, committee members are also provided copies.

The non-thesis option requires 30 hours of coursework at the 400 level or above. Of these, 24 hours (at least 18 of which are in economics) must be at the 500 level or above. Of the 18 hours in economics at the 500 level or above, 12 must consist of 511-12 and 513-14. Of the 30 hours, a maximum of 9 hours in courses approved by the department may be taken in fields other than economics. Students electing the non-thesis option must pass, at the MA-level or higher, the qualifying examination in either microeconomics or macroeconomics.

Students may enter the program with the goal of earning an M.A. Other students may complete the M.A. during the process of working toward the Ph.D. In the latter case the student completes the “Request for Concurrent Master’s Degree” form, which signals to the Graduate School that the intention is to remain in the Ph.D. program. Students have six calendar years from the time of enrollment in the Graduate School to complete the M.A.

7. Requirements for the M.A. or Ph.D. with a Minor in Environmental Policy

The program is designed to give Master’s and Doctoral level graduate students an opportunity to develop an interdisciplinary specialization in environmental policy. While administered through the Political Science department, the program is coordinated by a committee of representatives from the following participating departments and programs – Agricultural & Resource Economics; Civil and Environmental Engineering; Ecology and Evolutionary Biology; Economics; Forestry, Wildlife and Fisheries; Geography; Management; Political Science; and Sociology.

Students may request admission to the minor following admission to a graduate program in one of the participating departments. Students in good standing in one of these programs may apply for admission to the minor in environmental policy. The coordinating committee will consider the admission of interested students. Applicants should have a background in both natural and social sciences evidenced by prior course work or experience.

One course in environmental studies from the student's major discipline and one course in quantitative methods are required. These requirements may be fulfilled before or after admission to the minor. All students admitted to the minor will be required to register for POLS 549 and to complete the following courses.

- A choice of EEB 421 or EEB 484 or another Ecology and Evolutionary Biology course with the consent of the program coordinating committee or GEOG 433 or approved equivalent as determined by the program coordinating committee.
- 6 hours of course work outside the major discipline approved by the coordinating committee.

Doctoral students seeking a minor in environmental policy must also complete, in addition to above, a policy-relevant dissertation approved by the coordinating committee.

8. Seminars

The department runs two seminar series. The first is the Brown Bag Research Workshop, which meets most Wednesdays of the semester from noon to 1 pm. About half of the seminars are typically from Faculty and the other half are from graduate students. Graduate students have priority and are encouraged to participate. At the end of each academic year, the student who gives the best presentation (based on faculty vote) receives a prize.

The second is the Greer Seminar Series, which meets around 8 to 10 times a semester. Greer seminars are typically held on Monday afternoons, and feature prominent faculty from other institutions. Past speakers have included editors and co-editors of prominent economics journals, key members of professional associations, and Nobel Laureates. Job market candidates, whether current students or persons the department is considering for an open position, are also featured. In most cases time is set aside for the seminar speaker to meet with graduate students.

Although there is not an official attendance policy per se, unless the student has a legitimate conflict, it is expected that students attend all Brown Bag workshops and Greer seminars.

9. Registration and Advising

9.1. Advising

The Graduate Director advises all entering graduate students. Initial meetings with the Graduate Director will typically be scheduled in early August. Ph.D. students should identify a dissertation advisor by the end of the Spring semester of the second year. This faculty member will then assume primary responsibility for advising the student and will work with the Graduate Director in organizing the student's program of study. The faculty advisor normally should be a faculty member who shares research interests with the student. All students should continue to consult with the Graduate Director at least once per year, typically during the summer.

Copies of course syllabi are available in the department and may be reviewed by students who are choosing courses and fields of specialization. Students may also find it helpful to review faculty vita, available on the department web site, to determine areas of faculty interest and specialization. Ongoing dialogue with faculty and other students in the department can be very helpful in guiding students to fields of study.

Any changes in registration (drops, adds, or changes in type of credit) must be approved in advance. All petitions (see below) should be addressed to the Graduate Director.

The Department Head and the Graduate Director may call special meetings with graduate students several times during the year. All graduate students are expected to attend unless there are class (or other binding and excusable) conflicts.

9.2. Registration procedures and guidelines

It is the student's responsibility to register for classes. Registration is done through MyUTK (<http://my.utk.edu>). It is recommended that students consult with the Graduate Director prior to registration. Unless special permission is granted, all entering students must register for ECON 511, 513, 581 and 582 in their first semester.

The maximum course load for a graduate student is 15 hours per semester; 9 to 12 hours is considered a full load. A student who has a full-time (i.e., 50 percent or 20 hours per week) graduate assistantship is not allowed by the Graduate School to take more than 11 hours; 9 hours is the typical course load. An exception to this occurs for all students in the fall of their first year of study, when they typically register for 581 (offered during August) and 511, 513, and 582 (offered during the fall semester). Students may not otherwise register for more than 9 hours without approval from the Graduate Director (see Financial Support section for minimum registration requirements for those receiving financial assistance).

Until students begin completing hours of 500 (Thesis) or 600 (Dissertation), they must register for 502 (Use of Facilities) in all terms, including summer, in which no other courses are taken. Failing to register for 502 may place certain benefits (e.g., health insurance, library privileges) in jeopardy.

All changes in registration (drops, adds, and change to audit) should be approved by the Graduate Director in advance. The deadline for a change of registration is approximately 35 calendar days after the first day of classes each semester. Graduate students are not allowed to repeat a course for the purpose of improving upon a grade that has already been received.

10. Standards, Problems, and Appeals

10.1. Continuation and termination

The Graduate School will place a student on probation if their cumulative GPA falls below 3.0. A student will be allowed to continue graduate study in subsequent semesters if each semester's

grade point average is 3.0 or greater. If a student is on academic probation and fails to earn at least a 3.0 GPA in the next semester, that student's status as either a degree or non-degree seeking student will be terminated. Registration for courses in a department from which a student has been dismissed will not be permitted except by written authorization from the department.

Students on probation must consult with the Graduate Director in choosing courses. To continue in good standing in the department, it will be necessary that a minimum GPA of 3.0 be earned in graduate courses in economics or in courses approved in advance by the Graduate Director. (Students on assistantship must maintain a GPA of 3.25 or better in order to avoid departmental probation, as described above.) Unless prior approval has been given, a student on probation should take a full load of courses (9-12 hours) during the probationary semester. (Students on assistantship are not permitted to take more than 11 hours of coursework.)

Aside from failing to adhere to GPA requirements, the most common reason for early termination from the Ph.D. program is failure to pass one or both theory qualifying examinations. In many cases, students elect to fulfill the requirements for the M.A.

10.2. Course grades of “incomplete”

An incomplete (I) is a temporary grade indicating that the student has performed satisfactorily in the course but, due to unforeseen circumstances, has been unable to finish all requirements. An incomplete is *not* given to enable a student to do additional work to raise a deficient grade. The university requires that all incompletes must be removed within a year. If a supplementary grade report has not been received in the Graduate Admissions Office in time, the incomplete will be changed to an F. The course will not be counted in the cumulative grade point average until a final grade is assigned. No student may graduate with an incomplete on their academic record.

Departmental policy specifies that when grades of incomplete are recorded the faculty member and the student should have agreed upon a time and a method for removal of the incomplete. All incompletes should be removed as soon as possible.

10.3. Student conduct

The department and the university expect graduate students to be absolutely committed to academic honesty and integrity. Academic cheating or plagiarism will not be tolerated and are grounds for expulsion from the university. A graduate student guilty of academic dishonesty will have her/his assistantship terminated (with the required one-month notice).

10.4. Department appeals process

Students have the right to appeal grades and the results of qualifying and other examinations, and to file grievances concerning the interpretation and adherence to university, college, and department policies and procedures. Broadly interpreted, just about any outcome or requirement the student is in disagreement with can be disputed. According to university policy, the first appeal should be made within 30 days after the incident that occasions the appeal; e.g. a dispute over a course grade needs to be made within 30 days of when the final grade has been posted. It

is strongly recommended, however, that appeals be made within 2 weeks. This is particularly important as, for example, some faculty are likely to have scheduling conflicts when classes are not in session.

It is highly recommended that students begin their appeal process at the lowest, relevant level. This avoids delays and unnecessary tensions among the parties involved. Disputes over grades should first be addressed with the course instructor. Disputes over qualifying exams or the second-year paper should be first discussed with the examination committee. Grievances about degree requirements and department policy should be made to the Graduate Director. A student that is not satisfied with the initial outcome can proceed up the basic hierarchy: Faculty, Graduate Director, Graduate Committee, Department Head.

There is no official form required for an appeal. When made at the level of the faculty or Graduate Director, in most cases the appeal can be handled in person or via email. Appeals made to the Graduate Committee, the common one being a request to take a qualifying examination or submit a second-year paper a third time, should be made in writing. There is no standard form, but the request should be typewritten and include any relevant information the student wishes the Committee to take into consideration. It is recommended that appeals to the Department Head be made in writing.

10.5. University appeals procedure

A student who is not satisfied with appeals made through the department has the right to appeal at higher levels. If the appeal is denied or is determined to be outside the purview of the department, the student may appeal in writing to the Dean of the College within 30 days of the departmental decision.

If the student wishes to appeal the decision of the College, he or she may file a formal appeal with the Graduate Council Appeal Committee through the office of the Assistant Dean of the Graduate School within 30 days of the college decision. If the head or dean does not respond within 30 days of receiving the student's written appeal, the student should take the appeal to the next level. The most pertinent information regarding a university appeal appears below. More details can be found at <http://gradschool.utk.edu/studappresrce.shtml>.

Students may appeal grades only on the basis of one or more of the following allowable grounds: (1) A clearly unfair decision (such as lack of consideration of circumstances clearly beyond the control of the student, e.g., a death in the family, illness, or accident); (2) Unacceptable instruction/evaluation procedures (such as deviation from stated policies on grading criteria, incompletes, late paper examinations, or class attendance); (3) Inability of the instructor to deal with course responsibilities; or (4) An exam setting which makes concentration extremely difficult.

Students with grievances related to race, gender, religion, national origin, age, or handicap should file a formal complaint with the Office of Equity and Diversity with a copy to the appropriate academic department head.

The student with a grievance to be appealed concerning grades, policies, or procedures must first follow the existing departmental procedure. At a minimum, the student must confer with the appropriate faculty member, advisor and/or major professor, the Director of the graduate program, and then, if the issue remains unresolved, with the Department Head. The formal appeal to the Graduate Council Appeals Committee must include the following written documentation:

- Name of student filing the appeal.
- Program in which the student is enrolled.
- Name of student's major advisor.
- Current contact information for the student.
- Brief statement of the decision being appealed and the grounds for the appeal.
- Name and position (title and relationship to student) of the person(s) to whom the original appeal was made and date of the original appeal.
- Copies of the original statement of appeal, supporting documents clearly stating the reasons on which the appeal is based, and a statement of what remedy is being sought.
- Copies of all official statements concerning the grievance proceedings held at the departmental and college levels and the decisions rendered in these earlier appeals, including the response by the person(s) to whom the appeal was first made.
- Statement of why the previous decisions are in error.
- Release signed by the student to allow the appeal documents to be shared with members of the Appeals Committee.

It is the student's responsibility to make the case for the appeal. That is, the student should clearly indicate in the matter of a grade appeal one or more of the allowable reasons for appeal listed above and in the matter of an appeal of policies and procedures one or more indications of how proper policy or procedure was not followed.

To initiate the formal appeals procedure at the Graduate Council level, the student must submit a letter of appeal containing all the above information to the Assistant Dean of the Graduate School with copies to the Department Head and Dean of the student's college. The Assistant Dean will promptly forward the material to the Chair of Appeals of the Graduate Council. The Chair will then appoint two other members of the Graduate Council Appeals Committee to serve on an appeals panel along with a graduate student member. The Assistant Dean will distribute all materials to these members of the Appeals panel, and will convene the members at the earliest opportunity. The Appeals Panel will at this meeting record by majority vote whether or not a hearing concerning the appeal should be held or if the appeal should be denied. The Appeals Committee will notify the Dean of the Graduate School of its decision in a timely manner.

10.6. Compliance with legal requirements for research

The UT Institutional Review Board (IRB) regulates all research activities involving human subjects on the UT Knoxville campus. The IRB is a committee appointed to ensure rights, safety, and welfare of human research subjects; ensure compliance with all applicable federal and state laws/regulations; and conduct ethical reviews of human research activities including initial, continuation, modification, unanticipated problems and alleged noncompliance. Its primary responsibility is to assure UT Knoxville researchers operate within the provisions of the

Federalwide Assurance of Compliance filed with the U.S. Department of Health and Human Services (DHHS) Office for Human Research Protections (OHRP).

In economics, the vast majority of applied research involves human subjects in some capacity. The most common cases when IRB approval needs to be obtained are:

- Survey research (including a pilot survey).
- Laboratory and field experiments (including pilot experiments).
- Analysis of secondary data (from surveys, experiments, or other sources).

If your research involves data from living individuals, and you plan to disseminate the research (e.g. thesis, dissertation, publication, seminar, etc.) then you must obtain IRB approval. If you are instead collecting or analyzing data from aggregate units (e.g. firms, countries, etc.), deceased individuals and/or have no intention to disseminate research findings, then IRB approval is not required. A prime example where one collects data on living individuals but does not usually disseminate the findings would be a classroom experiment or survey; that is, for research-like activities that are for pedagogical purposes only.

Gaining approval for pilot studies and for analysis of secondary data is often overlooked. If you wish to analyze data from the Panel Study of Income Dynamics, for instance, you need to obtain prior IRB approval. NOTE: It is the policy of the UT Experimental Economics Laboratory that IRB approval is obtained prior to conducting *any* experiment. This includes course-related experiments for extra credit.

Thus, for research involving human subjects it is the *rule* that you need to obtain permission from the IRB *prior* to undertaking any research. There are two parts to the compliance process. The first part is to undergo human subjects training. The second part is, for each relevant project, to complete a (lengthy) application. Both parts are online. The compliance training is through the Collaborative Institutional Training Initiative (CITI) program (<https://www.citiprogram.org/>). The application system is iMedRIS (<https://ris01.uthsc.edu/>). Both the Department Review Committee (DRC) Chair and the Department Head review and sign (electronically) the applications before they are sent to the IRB. As such, it may be advisable to discuss this with them ahead of time. Details on the IRB approval process can be found at <http://irb.utk.edu/>.

The vast majority of economics IRB applications are exempt from review of the full IRB board. In most cases formal approval can be obtained in a few weeks. The Office of Research & Engagement holds workshops for students and faculty on the approval process.

11. Job Placement Information

Students who have diligently completed department requirements have the right to expect assistance in finding suitable employment following the award of a degree. It will be the responsibility of the Graduate Director and of the Department Head to inform graduate students of the nature of the job market and to inform them of sources of job information. Students who are leaving the program with an M.A. are urged to consult the University Placement and Career Planning office for assistance in finding employment. Those who leave the program with a

Ph.D. will find information on academic jobs contained in *Job Openings for Economists* (JOE, available on the web at www.aeaweb.org/joe/).

Students who wish to participate in the formal academic job market, which includes taking part in job screening interviews at the Allied Social Sciences Association (ASSA) annual conference in early January, must present their job market paper as part of our Greer Seminar Series during the Fall semester. This is intended to be a practice job talk through which faculty can provide assistance to improve the quality of the research and its presentation. The seminar also serves as a commitment device to ensure that job candidates prepare early for the job market.

The Graduate Director arranges for job candidates to engage in practice, mock job interviews with department faculty in late November / early December. Job candidates are strongly encouraged to arrange for additional practice interviews, and discuss interview strategies with faculty and students.

11.1. Initial placements of recent graduates

The department maintains and posts a list of job placements of Ph.D. recipients, which can be found here: <http://econ.bus.utk.edu/documents/InitialPhDPlacement.pdf>. In recent years we have placed graduates as assistant professors at Bates College, Belmont University, Creighton University, Furman University, New Mexico State University, Rollins College, University of Alberta, University of Delaware, Virginia Commonwealth University, Winthrop University, Xavier University and elsewhere. We have also placed students well in government agencies, industry, and research centers, including Joint Committee on Taxation of the US Congress, US Government Accountability Office, Central Bank of Jordan, US Department of Defense, Howard H. Baker Jr. Center for Public Policy (UT), Korea Institute for Industrial Economics and Trade, King Abdullah Petroleum Studies and Research Center, and CVS Caremark.

Most of our M.A. graduates find employment prior to graduation or go on to Ph.D. programs at Tennessee or elsewhere. Recent graduates have found employment at Pilot Corporation, Marriott Business Services, Sequent Energy Management, Boyd Center for Business and Economic Research (UT), Department of Energy (ORNL), Centra Technology, International Trade Administration, and the Tennessee Valley Authority.

12. Faculty and Areas of Specialization (tenured and tenure-seeking faculty)

Bruce, Donald, Ph.D., Syracuse University. Fields of interest: public economics, taxation, labor economics, applied econometrics. Graduate teaching: Public Finance.

Carruthers, Celeste, Ph.D., University of Florida. Fields of interest: education economics, public economics, labor economics, economic history.

Clark, Don, Ph.D., Michigan State University. Fields of interest: international economics, growth and development, health economics.

Fox, William, Ph.D., Ohio State University. Fields of interest: public economics, taxation. Graduate teaching: public finance.

Gauger, Jean, Ph.D., Iowa State University. Fields of interest: macroeconomics, monetary economics. Graduate teaching: macroeconomic theory.

Gilpatric, Scott, Ph.D., Texas A&M University. Fields of interest: industrial organization, environmental economics, behavioral economics. Graduate teaching: microeconomic theory, industrial organization.

Hargaden, Enda, Ph.D., University of Michigan. Fields of interest: public finance, political economy, environmental economics.

Harris, Matthew, Ph.D., University of North Carolina. Fields of interest: labor economics, health economics. Graduate teaching: econometrics.

Holladay, J. Scott, Ph.D., University of Colorado. Fields of interest: international trade, environmental economics. Graduate teaching: environmental economics.

Lima, Luiz Renato, Ph.D., University of Illinois. Fields of interest: forecasting, international finance, econometric theory. Graduate teaching: econometrics.

Mohsin, Mohammed, Ph.D., York University. Fields of interest: macroeconomics, monetary theory, time Series econometrics. Graduate teaching: macroeconomic theory, international finance, mathematical economics.

Murray, Matthew, Ph.D., Syracuse University. Fields of interest: public economics, labor economics, health economics. Graduate teaching: public finance.

Neilson, William, Ph.D., University of California – San Diego. Fields of interest: game theory, decision theory, behavioral economics. Graduate teaching: microeconomic theory, mathematical economics.

Santore, Rudy, Ph.D., Ohio State University. Fields of interest: industrial organization, law and economics, behavioral economics. Graduate teaching: microeconomic theory, industrial organization.

Schaur, Georg, Ph.D., Purdue University. Fields of interest: International Trade, Applied Econometrics, Industrial Organization. Graduate teaching: econometrics, international trade.

Sims, Charles, Ph.D., University of Wyoming. Fields of interest: environmental and resource economics, risk and uncertainty, dynamic economic systems. Graduate teaching: environmental economics, microeconomic theory.

Vossler, Christian, Ph.D., Cornell University. Fields of interest: environmental and resource economics, behavioral and experimental economics, public economics, applied econometrics. Graduate teaching: econometrics, behavioral & experimental Economics.

Wanamaker, Marianne, Ph.D., Northwestern University. Fields of interest: labor economics, economic history, applied econometrics.

Faculty web pages can be accessed through: <http://econ.bus.utk.edu/department/faculty.asp>.

13. Contact Information

Department Head

Name: William Neilson

Office: 509 Stokely Management Center

Phone: 865-974-1691

Email: wneilson@utk.edu

Director of Graduate Studies

Name: Christian Vossler

Office: 523 Stokely Management Center

Phone: 865-974-1699

Email: cvossler@utk.edu

Graduate Program Assistant

Name: Sherri Pinkston

Office: 507 Stokely Management Center

Phone: 865-974-3303

Email: spinksto@utk.edu

The fax number for the Department is: 865-974-4601.

The general department mailing address is: Department of Economics, 916 Volunteer Blvd, 505A Stokely Management Center, Knoxville, TN 37996-0550

Appendix A: Important Web Pages for Graduate Students

- American Economic Association (AEA)
<http://www.aeaweb.org/>
- Best Practices in Teaching Program
<http://gradschool.utk.edu/training-and-mentorship/bpit/>
- Boyd Center for Business and Economic Research
<http://cber.utk.edu/>
- Center for International Education
<http://international.utk.edu/>
- Counseling Center
<http://counselingcenter.utk.edu/>
- Department of Economics
<http://econ.bus.utk.edu/>
- Funding, Fellowships, Assistantships for Graduate Students
<http://gradschool.utk.edu/graduate-student-life/>
- Job Openings for Economists (JOE)
<http://www.aeaweb.org/joe/>
- Graduate School
<http://gradschool.utk.edu/>
- Graduate Catalog
<http://catalog.utk.edu/index.php?catoid=19>
- Graduate Student Appeals Procedure
<http://gradschool.utk.edu/documents/2016/02/student-appeals-procedures.pdf>
- Graduate Student Senate
<http://gss.utk.edu/>
- Graduate Admissions
<http://gradschool.utk.edu/admissions>
- Haslam College of Business
<http://haslam.utk.edu/>

- Housing
<http://housing.utk.edu/>
- Howard H. Baker Jr. Center for Public Policy
<http://bakercenter.utk.edu/>
- International House
<http://ihouse.utk.edu/>
- International Teaching Assistant (ITA) Testing Program (OPIc)
<http://gradschool.utk.edu/graduate-student-life/ita-testing-program/>
- Judicial Affairs
<http://web.utk.edu/~osja/>
- Library Website
<http://www.lib.utk.edu/>
- MyUTK
<http://my.utk.edu/>
- Office of Equity and Diversity
<http://oed.utk.edu/>
- Office of Information Technology (OIT)
<http://oit.utk.edu/>
- Office of Minority Student Affairs/Black Cultural Center
<http://multicultural.utk.edu/>
- Office of Research & Engagement
<http://research.utk.edu/>
- Thesis/Dissertation Website
<http://gradschool.utk.edu/thesesdissertations/>
- UT Student Handbook – *Hilltopics*
<http://dos.utk.edu/wp-content/uploads/sites/32/2016/04/StudentRights.pdf>

Appendix B: Important Deadlines and Forms

Graduation Deadlines

Dates vary slightly from one year to the next. Please go to the Graduate School website to verify dates and download forms: <http://gradschool.utk.edu/graduation/graduation-deadlines/>.

Fall 2016 graduation deadlines

- Submit Doctoral Committee Appointment form to Grad School (Ph.D.): prior to August 9
- Submit Admission to Candidacy form to Graduate School: August 9
- Submit Graduation Application online at MyUTK: August 9
- Submit draft of thesis/dissertation online (thesis@utk.edu): October 7
- Submit Scheduling of Defense of Dissertation form to Grad School (Ph.D.): October 28
- Defend thesis/dissertation: November 4
- Submit final copy of thesis/dissertation to Trace: November 18
- Submit Report of Final Examination: November 18
- Verify removal of incompletes for graduation: December 1

Spring 2017 graduation deadlines

- Submit Doctoral Committee Appointment form to Grad School (Ph.D.): prior to December 1
- Submit Admission to Candidacy form to Graduate School: December 1
- Submit Graduation Application online at MyUTK: December 1
- Submit draft of thesis/dissertation online (thesis@utk.edu): February 24
- Submit Scheduling of Defense of Dissertation form to Grad School (Ph.D.): March 31
- Defend thesis/dissertation: April 7
- Submit final copy of thesis/dissertation to Trace: April 19
- Submit Report of Final Examination: April 19
- Verify removal of incompletes for graduation: April 28

Summer 2016 graduation deadlines

- Submit Doctoral Committee Appointment form to Grad School (Ph.D.): prior to April 29
- Submit Admission to Candidacy form to Graduate School: April 29
- Submit Graduation Application online at MyUTK: April 29
- Submit draft of thesis/dissertation online (thesis@utk.edu): June 17
- Submit Scheduling of Defense of Dissertation form to Grad School (Ph.D.): July 8
- Defend thesis/dissertation: July 15
- Submit final copy of thesis/dissertation to Trace: July 29
- Submit Report of Final Examination: July 29
- Verify removal of incompletes for graduation: August 9

Travel funding deadlines

The department and college funding applications will be provided by the Graduate Director prior to each application deadline. The Graduate Student Senate (GSS) application process is online at <http://gss.utk.edu/travel-awards/>. Department deadlines are typically two weeks prior to those of the GSS.

Graduate Student Senate travel award (2016-17 AY)

- Fall travel (September 1 to December 31): August 22
- Spring travel (January 1 to April 30): December 12
- Summer travel (May 1 to August 31): April 17