

Department of Economics

Graduate Program

Graduate Handbook 2019-2020

If you are a continuing student you might wish to consult an older version of the graduate handbook, available on the department webpage.

Although the department offers both MA and PhD degrees, the emphasis is on the PhD program. **Prospective students must apply to the PhD program and admission is to the PhD program only.** Students have the option of obtaining an MA degree enroute to the PhD or they can choose to leave the graduate program with an MA degree at the end of the first year, provided that they have fulfilled the necessary requirements (see below).

The following detailed list of requirements for the Ph.D. degree and satisfactory progress along the way have been developed with the goals of both successful job placement and timely completion of the Ph.D. degree. The preliminary exams in microeconomics, macroeconomics and econometrics are completed at the end of the first year and remaining required coursework is completed at the end of the second year. The third year is devoted to development of a thesis prospectus (explained below), aided by attendance and participation in the many department seminars and workshops and interaction with relevant faculty. Once the oral qualifying exam, based on the thesis prospectus, is passed, the remainder of the time is devoted to writing of the thesis and further development as a scholar through seminar attendance and participation.

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A. Graduate Advising

Each graduate student is assigned a graduate adviser who provides assistance in planning a program of study and in other matters. In addition, each PhD student selects an Interim Adviser after completion of the preliminary examinations, and a thesis committee upon advancement to candidacy.

The Graduate Studies Committee is composed of the graduate program chair, five other faculty members and three PhD students. While the faculty members administer the program, the entire committee is responsible for the consideration of policy. A student who wishes to fulfill degree requirements in a manner other than described in this *Handbook* must submit a request

in writing to the graduate program chair. Inquiries may be addressed to the graduate program coordinator, Dana Reed.

B. Before The First Year Begins

Pre-admission requirements: Students admitted to the graduate program in economics are normally expected to have completed an undergraduate degree in economics. (The minimum requirement is intermediate microeconomics and macroeconomics plus two upper division courses in economics.) Entering students are also expected to have completed two courses in college statistics (at least one at the upper division level) and one year of calculus prior to admission. They are also expected to have completed a course in linear algebra. This basic mathematical preparation is critical to success in the first year.

GRE scores for applicants: Applications to the graduate program in the Economics department at UC Davis will **NOT BE CONSIDERED** if:

1. The GRE Verbal score is less than 60% (for international students: if it is less than 30%)

OR

a) The GRE Quantitative score is less than 70%

Additional requirement for international students:

3. The TOEFL score must be at least 600 points (or 250 if computer based TOEFL) or total score of 68, counting all 4 sections of the IBT TOEFL (Internet based TOEFL).

September lectures in mathematical methods: The department offers an intensive series of Lectures in Mathematical Methods typically beginning after Labor Day (early September). These lectures focus on differential calculus and linear algebra, building upon rather than sufficing for the undergraduate preparation described above. The lectures emphasize the specific tools used in the required first-year micro, macro, and econometrics courses, and all students in these courses will be assumed to have mastered the material covered in the September lectures. Therefore, while these lectures are informally structured (registration and the payment of fees are not required), all students—including those with extensive coursework in mathematics—should attend.

C. The First Year In The Graduate Program

a. First year Coursework:

Every first-year student, no matter what his/her degree objective, is required to take the following courses:

1. **Microeconomic Theory:** Economics 200A (Fall), 200B (Winter) and 200C (Spring), or successful completion of the Microeconomic Theory preliminary exam.
2. **Macroeconomic Theory:** Economics 200D (Fall), 200E (Winter), and 200F (Spring), or successful completion of the Macroeconomic Theory preliminary exam.
3. **Econometrics:** Economics 239 (Fall), Economics 240A (Winter) and Economics 240B (Spring), or successful completion of the Econometrics preliminary exam.

The **FIRST YEAR** course schedule is thus as follows:

| | | | |
|---------------------|-----------------------|-----------------------|------------------|
| Fall Quarter | Winter Quarter | Spring Quarter | June/July |
|---------------------|-----------------------|-----------------------|------------------|

| | | | |
|----------------|----------------|----------------|----------------|
| Economics 200A | Economics 200B | Economics 200C | micro prelim |
| Economics 200D | Economics 200E | Economics 200F | macro prelim |
| Economics 239 | Economics 240A | Economics 240B | metrics prelim |

Consistent with the policies of the Office of Graduate Studies, students must receive a grade of C or better in any course to receive credit towards either the MA or the PhD degree.

All first year students are required to take the micro theory, macro theory and econometrics first-year courses, except in two cases. (1) In some rare instances, a new student has been allowed to take preliminary exams in August prior to entering our Ph.D. program and passed. (2) If a new student already passed similar prelim exams for a Ph.D. (not master) degree at another institution, the graduate program chair may accept this in lieu of our theory courses and prelim exams. Simply completing a master's degree in economics does not satisfy this requirement.

In exceptional cases where the econometrics faculty and graduate program chair agree that a student has previous coursework equivalent to our whole first year econometrics sequence (ECN 239, 240A, 240B), the first-year econometrics sequence may be waived, and the student will instead take the second year econometrics sequence (ECN 240C, 240D and either 240E or F) in their first year. A student who thinks he or she fits in this category should contact the graduate program chair two weeks before fall quarter begins, and present him/her with evidence of past econometrics and statistics courses, including grades and syllabi listing the text. The chair will refer the case to econometrics faculty for evaluation.

Economic History/History of Economic Thought: In addition to the first year courses, all PhD students must, by the Winter Quarter of the third year, satisfy the following requirement: one course selected from Economics: 201A, 201B, 210A, 210B, 210C or 210D, passed with a grade of B or better.

b. Core theory prelims:

All first-year students must take written preliminary examinations ("prelims") in Microeconomic Theory (covering Economics 200A, B, C), Macroeconomic Theory (covering Economics 200D, E, F), and Econometrics (covering Economics 239, 240A, B). *Preliminary examinations should be taken in late June/early July immediately following the first year.*

Prelims are "closed book" and are graded on a 0-4 numerical scale as follows:

- Fail (0-1.79)
- Pass at the MA Level (1.80-1.99)
- Pass at the PhD Level (2.00-2.99)
- Good (3.0-3.99)

Grades of 3.0 or above reflect unusually good performance. All exams are graded by three faculty members. Students may read the examiners' comments by contacting the graduate program coordinator.

Students can pass preliminary examinations in one of two ways.

- a) Earning a grade of "pass at the PhD level" on one of the three exams and a grade of "pass at the MA level" on the other two exams, or
- b) Earning a grade of "pass at the PhD level" on two exams and earning a cumulative GPA of at least 3.25 in the third core sequence, with a least a B- in each course in the sequence.

Retaking core theory prelims and time limits: To allow for instances in which a core theory prelim is not passed at the first attempt (or for unusual situations beyond the student's control), the exams may also be administered in August or September. Students may re-take each exam not more than once, that is, only two attempts are allowed for each exam.

Registration requirements

Students must register for a minimum of 12 units per Quarter, including Individual Study (Economics 299) where appropriate.

c. At The End Of The First Year

1. A student who has completed the first-year courses (Ecn 239, Ecn 200A,B,C,D,E,F, Ecn 240A,B) with a GPA of at least **3.0**, and passed at least two of the three prelim exams at the MA-level can obtain an MA degree. Applying for a Master's degree does not preclude remaining in the PhD program, as long as the requirements for good standing in the PhD program are met (see point 2 below).

(Thus the MA degree is through the university's Plan II (examination) only: students are required to take 36 units of graduate courses in Economics and to pass two of three written preliminary examinations in microeconomics, macroeconomics and econometrics.)

Students who already have a Master's degree *in economics* from another university will not be able to obtain a second Master's degree in Economics from UC Davis.

2. In order to continue into the second year of the PhD program, the student must meet the following requirements at the end of the 12-month mark:
 1. completion of the first-year courses (Ecn 239, Ecn 200A,B,C,D,E, F, Ecn 240A,B) with a letter grade of B- or better in each course,
 2. a cumulative GPA of at least **3.25**, and
 3. Passing prelim exams in one of two ways:
 - o Earning a grade of "pass at the PhD level" on one of the three exams and a grade of "pass at the MA level" on the other two exams, or
 - o Earning a grade of "pass at the PhD level" on two exams and earning a cumulative GPA of at least 3.25 in the third core sequence, with a least a B- in

each course in the sequence.

3. If a student fails to satisfy either requirement 1 or 2 of the PhD requirements above, the student may petition the graduate program chair to remain in the PhD program. After a review of the student's complete record, the student will be given a specific number of quarters (typically one in the case of a GPA below 3.25) to satisfy the requirement. If the student fails to satisfy the requirement after that time, the Graduate Studies Committee may recommend that the student be disqualified from the graduate program, but the student may still receive an MA degree if all MA requirements have been met.
4. Any student who fails to pass prelim exams under requirement 3 will have his or her case considered by the Preliminary Examination Committee. The committee will evaluate the student's record at UC Davis, including, but not limited to, the student's performance on prelim examinations, on final and midterm exams in the first-year core sequence and on other material evaluated in first-year courses. The committee will make the final decision about whether the student passes the preliminary examinations and continue into the second year of the program.
5. A student who, before the beginning of the second year, fails to meet the requirements listed under point 2 above must leave the graduate program. This requirement may be waived on petition to the Chair of the Graduate Studies Committee if the student can prove adequate grounds. If the student fulfills the requirements listed under point 1, he/she can leave with an MA degree.

D. The Second Year In The Graduate Program

The PhD degree requirements after successful completion of the first year are:

- (a) Field courses in 2 "Major" elective fields of specialization, with a grade of B+ or better, plus two additional courses in a third "Minor" elective field, with a grade of B- or better,
- (b) submission of a paper or in-depth literature review by Sept. 30 following completion of the second year,
- (c) submission of a "Third Year Paper" during the third year (a suggested target date is March 15, to be on track to take an oral exam by May 15),
- (d) an oral PhD qualifying examination by May 15th of the third year,
- (e) regular seminar attendance,
- (f) at least one seminar or workshop presentation by April 30th of the fourth year,
- (g) the thesis, and
- (h) a total minimum residency of at least two years.

A student may elect to take at most one course per quarter outside of economics on an S/U basis (in addition to any courses normally graded on an S/U basis) *provided that it does not fulfill any degree requirements*. Many students use the S/U option when taking optional courses outside economics (such as Math 125 B or C). (It is stated in the General Catalog that "the grade of S is awarded to graduate students for work in graduate courses that otherwise would receive a grade of B- or better and for work in undergraduate courses that otherwise would receive a grade of C- or better".) Students may take courses within economics on a S/U basis once they have advanced to candidacy for the PhD.

A student may satisfy the requirements as listed in any single *Graduate Handbook* in effect while registered in the graduate program, as long as registration is continuous.

a. Course Scheduling For PhD Students In The Second Year

In the second year the student completes all course requirements while attending seminars for at least one quarter:

| Fall Quarter | Winter Quarter | Spring Quarter | June through September |
|--------------------|--------------------|--------------------|---------------------------------------|
| Major Field Course | Major Field Course | Major Field Course | |
| Major Field Course | Major Field Course | Major Field Course | Literature Review & Research Proposal |
| Minor Field Course | Minor Field Course | Elective | |

The order in which the Minor Field courses and the elective are taken is immaterial (e.g. the student could take the elective in Fall and the Minor Field courses in Winter and Spring).

The normal course-load is three courses per quarter. If one of the fields consists of only two courses, the student can choose to take any other graduate-level economics course in the remaining quarter.

As indicated by the chart above, the required course load is three standard courses each quarter of the second year (397 and 291 do not count). Only under certain conditions can an independent study (299) substitute for an elective in the 2nd year: there was no field course or real elective of interest to take AND the student does a real, substantive project/paper. If the student wishes to follow this non-standard route, he or she should find a faculty to supervise the work, and then request written permission from the graduate program chair at least one week before the quarter begins.

If one of the fields in which the student is interested in is not offered in the student's second year, the student can petition the graduate program chair to postpone taking that field to the third year. The petition must be in writing at least one week before the beginning of Fall Quarter.

b. Fields of Specialization

Each student must complete coursework in two of the following fields of specialization, each of which consists of 2 or 3 related courses. Each course which will be used to satisfy the requirement for two "major fields" must be completed with a grade of B+ or higher. The following are the course sequences from which these elective fields may be chosen. This list may change somewhat year by year, depending on what courses are being offered. Prior to each year, the graduate program chair will provide a current list of fields offered, and which courses will comprise those fields.

The list below details the major field courses for the **2019-2020 academic year**. Major field requirements might change in the future, depending on course offerings.

- Advanced Economic Theory: 203A, 203B, 203C
- Advanced Macroeconomics: any three from 235A, 235B, 235C and 235D
- Econometrics: 240C, 240D, and one of 240E or 240F.
- Development: 215A, plus two from 230A, 215B or 215C.
- Economic History: any three of 210A, 210B, 210C and Prof. Perez's 290
- Industrial Organization: 221A, 221B, and 221C
- International: any three from 260A, 260B, 260C or 260F. Note that 260A and 260C focus more closely on international trade and 260B and 260F focus more closely on international macro.
- Labor Economics: 230A, 250B, Prof. Page's 290
- Public Economics: 230A, 230B, 230C

Economics minor field: The minor field may be completed by passing with a letter grade of B- or better two graduate courses in that field (see above for a list of courses in each field). These two courses must be in addition to those used to satisfy the core economic history/history of economic thought course requirement and must not be a component of the subject matter for the two major fields. Subject to that constraint, courses in the History of Economic Thought (201A,B) can be used to satisfy a minor field requirement.

Alternative minor fields: Students may also satisfy the minor field requirement by choosing courses to suit a specific interest in economics or in a related discipline, *subject to the written approval of the chair of the Graduate Studies Committee prior to taking the relevant coursework.* In recent years course sequences in the Graduate School of Management (Management 275A,B: Capital Markets and Corporate Finance), in the Law School (Contracts; Antitrust), in the Department of Agricultural and Resource Economics and in the Department of Mathematics have been approved as minor fields. (Because of registration restrictions and differences in the academic calendar, special arrangements must be made to take law courses.)

Students Specializing in Mathematical Economics or Econometrics: Students who plan to write a thesis in Economic Theory should take course work in real analysis (Math 25 and Math 125B, and C). Real analysis is very useful in Economics 203A,B,C and is helpful, more generally, in building the mathematical sophistication necessary to do modern microeconomic theory and theoretical econometrics. Note that, because Math 25 is a lower division course, it cannot count towards any of the degree requirements or electives, and is not included in graduate student GPAs. Students who plan to write a thesis in theoretical econometrics should take Statistics 131A,B,C and 230. Statistics 131A and one upper division course in statistics (such as Statistics 131B) will be accepted in lieu of Economics 239. In both cases, scheduling considerations will be important, and it is critical that students discuss their plans with an instructor in the field.

c. Literature Review

By the end of the summer after their second year in the program (no later than September 30th) students must have completed a detailed literature review (15 to 20 pages, double spaced in 12 pts.) in one of their major fields, and a related research proposal (3 to 4 pages). This research proposal should describe a research paper in the field to be undertaken and completed during their third year. Prior to turning in this review (and preferably early in the summer), students should find two faculty members who will serve as their third year paper committee, agree to read and evaluate their literature review, and provide advice on the research project throughout their third year. The literature review will be graded on a pass/fail basis. A paper submitted as part of the requirements for one of the field courses, cannot be resubmitted unless it incorporates a substantial amount of new material.

E. The PhD Program After the Second Year

After the second year, students are primarily involved in thesis research and, consequently, attend seminars on a regular basis. Courses will consist of electives, Econ 291 (research seminars), and Individual Study (Economics 299) as appropriate.

A student pursuing thesis research full-time should aim to complete the degree by the end of the fourth year. Students are expected to complete their degree within the "normative time" of five years.

a. Initiating Thesis Research

The department takes particular interest in helping students initiate thesis research, and several programs are available to students.

Seminar and "brown-bag" attendance is critical to obtaining thesis ideas, maintaining contact with faculty members, and seeing how research presentations are made. Seminar series are offered throughout the year in economic theory, applied microeconomics, macro/international and economic history, featuring presentations by faculty, students, and outside speakers. Students are expected to attend these seminars according to the following rules:

1. Every graduate student, with the exception of first-year and second-year students, is expected to register for and attend Economics 291 (Spring 2008 and later), and attend a minimum of 5 seminars of that 291 topic in each of the Fall and Spring quarters. Students should register for the section of 291 corresponding to the seminar(s) they attend regularly. ECN 291 enrollment and attendance is required for students in their third and later years who have not yet advanced to candidacy.
2. A student presentation in a seminar or a brown bag (i.e., informal workshop series) counts towards meeting the above requirement.
3. The seminar organizer will circulate a sheet of paper to be signed by the graduate students who attended the seminar. Hence, it is the responsibility of the student to notify the seminar organizer of his/her attendance.
4. If a student (again, with the exception of first and second year students) is enrolled in a 291 in a given quarter and he/she has not attended at least 5 seminars of that Econ 291 topic during that quarter, then he/she will get a grade of Unsatisfactory (or No Pass) in that 291.
5. The above requirement of 5 seminars per quarter is the *absolute minimum*. Students are strongly encouraged to attend more than the minimum. Seminar attendance is strongly recommended also to first and second year students.

6. Students beyond their second year should also register for Economics 299 (or 299D for those advanced to candidacy) with their primary dissertation advisor (their “Interim Advisor” if they have not yet taken the oral exam or their Dissertation Chair if Advanced to Candidacy). Students in their third year who have not yet decided on a dissertation advisor can register for 299 with the graduate program chair. Students must be in regular contact with their dissertation advisor to receive a satisfactory Econ 299 (or 299D) grade.

Third Year Paper: students must submit a research paper of a minimum 20 pages, double-spaced, during the third year (a suggested target date is **March 15**, to be on track for taking a May 15 oral exam) to the two faculty members who form their third year paper committee. This paper will be evaluated by the committee and assigned a grade of either “accept” or “revise.” Papers will receive an accept score when the faculty judge them to be of sufficient quality and completeness to form a substantial part of the dissertation prospectus. This research paper must be submitted and accepted prior to scheduling the Qualifying Exam.

An interim adviser will assist the student in formulating a research agenda, preparing for seminar or workshop presentations, and writing the thesis prospectus. The Interim Adviser need not necessarily serve later on the thesis committee, and a new Interim Adviser may be substituted if the direction of the student’s research changes. Each student should select an Interim Adviser no later than the **January 15** following completion of the last prelim. Students finding it difficult to select an Interim Adviser should consult with the graduate program chair for assistance.

Seminar and workshop presentations are excellent ways to receive feedback and to gain experience in making presentations. As thesis research develops, the student should schedule a presentation in the appropriate seminar series. Each student is required to make at least one presentation (see below).

b. The Oral Qualifying Examination and Advancement to Candidacy

The thesis prospectus: The Interim Adviser helps the student prepare the thesis prospectus, which should be approximately 20 double-spaced pages in 12 point fonts. The prospectus should outline clearly the intellectual content of a central chapter of the thesis by including (1) a clear exposition of the problem and a statement of what is new in the proposed research, (2) an indication that the student has read the literature enough to know whether the proposal is really new, and what significant problems are likely to be encountered, (3) a discussion of the relevant methodologies, and (4) a confirmation of the availability of usable data (if relevant). Approximately three pages of the prospectus should also contain an indication of what would constitute the remaining part of the thesis.

The oral qualifying examination is scheduled after the proposed thesis committee chair has approved the thesis prospectus and all other pre-thesis degree requirements have been satisfied. Questions will be related chiefly to the thesis, with the goal of confirming that a viable topic has been identified and that the student will be able to pursue the topic to successful completion using the proposed methodologies. The oral is a constructive exercise designed to

provide guidance to the student in research, and many students choose to tape-record the proceedings for later review.

Typically, the oral exam will last between one and two hours.

The examination committee will consist of four members of the Economics Department and 1 member from outside the department. All members of the orals committee must hold PhD degrees and must be professors from a UC campus unless the Interim Adviser secures a waiver from the Dean of Graduate Studies. The same person may not serve as both the *chair* of the oral and the *chair* of the thesis committee. A student must be registered during the quarter in which the exam is taken (Spring registration includes the following summer).

Scheduling and deadlines: Orals are scheduled only after the proposed thesis committee chair has approved a final draft of the thesis prospectus (or a penultimate draft on which the student is to make specified minor changes). The Request to Schedule Oral Examination form must then be submitted to the graduate program coordinator at least one month prior to the examination date. *The final prospectus must be distributed to the oral examination committee not later than two weeks before the oral.* Students should consult with the graduate program coordinator for help with scheduling the exam date. The prospectus should be submitted by **April 15th of the third year** and the oral exam should take place by **May 15th of the same year.**

Advancement to candidacy: The student may file for advancement to candidacy upon completion of the oral and all other degree requirements except the thesis. An Application for Advancement to Candidacy must be submitted to the Office of Graduate Studies and approved by that office before advancement occurs.

International students advanced to Ph.D. candidacy before the first day of a quarter are entitled to elimination of nonresident tuition for up to three years. See below under financial aid for details.

c. The Thesis

The thesis (dissertation) is the means by which candidates demonstrate research proficiency. Upon advancement to candidacy, the student will assemble a thesis committee consisting of three faculty members, chaired by the student's major professor, to direct the research. All three committee members must hold PhD degrees and must be professors from a UC campus unless the major professor secures a waiver from the Dean of Graduate Studies. Students should consult with the graduate program coordinator regarding thesis format and submission guidelines.

Verification of progress. By **April 30th of the fourth year** every student is required to give a **progress seminar** on his/her research. The purpose of the seminar is to show that substantial progress has been made since the PhD qualifying exam. The three members of the dissertation committee and at least one other faculty member (typically a faculty member who took part in the PhD qualifying examination) will be expected to attend the seminar. *At least two weeks*

before the seminar the student should submit a written paper of at least 20 double-spaced pages to the members of the dissertation committee and the fourth faculty member who will attend the seminar. The paper should contain all or most of the material on which the seminar will be based.

Students admitted before Fall Quarter of 2001 are grandfathered and may follow either the new rules or the old rules. The Chair of the Graduate Studies Committee is authorized to use discretion in allowing further exceptions for such students in the interest of fairness and conformity with rights that students may have under University regulations.

Students who complete the various requirements by the specified deadlines will be deemed to be making satisfactory progress towards their degrees and will accordingly receive favorable consideration when TA positions and fellowships are awarded.

F. Registration and Scholarship Requirements

Students must register for a minimum of 12 units each Quarter, including Individual Study (Economics 299) where appropriate. A minimum overall GPA of 3.25 is required for good standing in and for successful completion of the PhD program.

If the cumulative GPA falls below 3.25 for two consecutive quarters, the student may be asked to meet with the graduate program chair. After a review of the student's complete record, the student will be given a specific number of quarters to improve the GPA. If the cumulative GPA remains below 3.25 after that time, the Graduate Studies Committee may recommend that the student be dismissed from the PhD program (with an MA degree if the corresponding requirements are met).

Time Limits for Completion of Degree Requirements and Readmission

(Note: these are mainly university time limits and it is hoped and expected that student progress will be faster than this)

Five-Year Rule for advancement to candidacy: If a student has not advanced to candidacy by the end of the fifth year, registration will not be allowed except for the quarter in which orals are taken. (Note: As described in Section C above, the Department expects students to advance to candidacy in their third year.

Three-Year Rule for completion of the thesis: A student who is advanced to candidacy for the PhD and expects to complete the dissertation within the academic year may go on filing fee status for one quarter only (their last quarter in the program). Once the time limit is exceeded, filing fee status will automatically lapse. Similarly, students who break registration (without going on PELP or filing fee status) lose their student status.

Readmission after an absence: A student wishing to re-enter the program after a break in registration or after a lapse in filing fee status must file an application for readmission for the following Fall, subject to normal admissions deadlines. Readmission (if granted) may be conditional on retaking the oral and/or satisfying any new course or programmatic requirements then in effect.

G. Financial Assistance For Current Graduate Students

Information on deadlines and application requirements will be provided in January.

California residency for tuition purposes: Nonresident domestic students (US citizens and permanent residents) should take steps to be classified as California residents by the end of their first year.

Limits on appointments: Graduate students may hold academic teaching appointments (including TA, Associate-In, or Reader) for up to 18 quarters and may hold research appointments (GSR) for up to 21 quarters. There are no exceptions after the limits are reached.

Fellowships: New and continuing students (both foreign and domestic) may apply for fellowships, which provide a stipend and/or remission of fees. Applicants should have a GPA above 3.70 and both verbal and quantitative GREs above the 85th percentile to be considered for fellowship nomination.

Nonresident Tuition Fellowships and Reduced Nonresident Tuition: Continuing foreign students may apply for Nonresident Tuition Fellowships which provide for the full or partial remission of the nonresident tuition fee. NRTF's are offered to continuing foreign students on the basis of scholarship and progress in the graduate program. New nonresident students are automatically considered as NRTF applicants; no additional application is required.

International students who have been formally advanced to Ph.D. candidacy before the first day of a quarter are entitled to elimination of nonresident tuition for a maximum of 3 calendar years (regardless of registered quarters including any quarters on PELP) after *first* being advanced to candidacy. Because of the availability of this support, NRTF awards will not be offered beyond the fall quarter of the 4th year in residence.

Teaching Assistantships: TA's work with faculty members in Economics 1A and 1B (Principles of Economics) and in some upper division and graduate courses. They are generally assigned responsibility for two discussion sections per quarter. TA support to continuing students is offered on the basis of progress in the graduate program, scholarship, and teaching performance.

Research Assistantships and Work-Study Funding: Research assistant positions are generally offered to more advanced students. Some work-study funding may be available for domestic students.

H. Placement

Each October the department assists students in finding permanent employment by compiling a list of PhD students *who have passed their oral qualifying exam*, and by aiding students in sending individual job applications to potential employers. Students who have not passed their

orals may, of course, go on the job market, but the department does not consider a student fully ready to do so until advanced to candidacy.

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