

Department of Economics

Vanderbilt University

REQUIREMENTS FOR THE PH.D. DEGREE IN ECONOMICS

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I. Introduction to the Ph.D. Program in Economics

A. Overview of Requirements. Students in the Ph.D. program generally take courses during their first two or three years in preparation for their written preliminary examinations. The subjects of those examinations are microeconomic theory, macroeconomic theory, and one or two elective fields. Students normally take the theory examinations between their first and second years. In addition, students must fulfill requirements in statistics, mathematics, and in either the history of economic thought or in economic history. Having completed all these requirements, the student writes a dissertation proposal and is examined orally by the dissertation committee. Then the dissertation is completed, and it is defended before the student's committee at the final examination. It is possible to complete the degree in four years. The modal period is five years.

B. Sources of Information. The general requirements for the Ph.D. degree at Vanderbilt University appear in the Bulletin and the Regulations handbook of the Graduate School. Students should read both of these publications with care so that they will be aware of all the requirements of the Graduate School. This circular states the special requirements for the Ph.D. degree in economics and contains information with which graduate students in economics are expected to be familiar.

C. Preparation for Graduate School. Most students entering our Ph.D. program have majored in economics as undergraduates; some have an M.A. degree in economics. Such extensive training in economics is helpful but not necessary. It is essential, however, that each entering student have taken at least one year of calculus, one semester of statistics, and intermediate-level courses in microeconomic theory and macroeconomic theory. A one-semester course in linear algebra is also recommended.

Incoming students with deficiencies in one or more of these fields might not be prepared to take a normal first-year program of courses and might have to take certain remedial courses instead. Any deficiencies in these areas should be made up, whenever possible, before beginning graduate work.

II. Interaction with Faculty

A. The Director of Graduate Studies (DGS). The DGS advises graduate students in economics (except those in the Graduate Program in Economic Development) in planning their programs at Vanderbilt and in the selection of courses. If a student has done graduate work elsewhere, the DGS evaluates it and recommends to the Dean of the Graduate School the credits applicable to the Vanderbilt degree. Petitions to alter or waive requirements of these rules must be presented to the DGS and will be considered by the Committee on Graduate Studies.

B. Formulating a Dissertation. Students are encouraged to seek faculty advice when formulating proposals for doctoral dissertations (see Section VIII). It is possible and helpful to present the preliminary findings of dissertations or other research findings in a research workshop attended by interested faculty and students (see Section VII).

III. Residence and Transfer Requirements

A. Residence. Doctoral candidates must complete and pay tuition for 72 semester hours of graduate study, minus any approved hours of transfer credit (see paragraph B below). Candidates must complete at least one year of formal course work (24 semester hours) in residence at Vanderbilt. The semester hours not in formal course work consist of research hours (Economics 349a-b, 390, 398, or 399). Hours of Economics 390 are assigned the grade ultimately assigned to the dissertation proposal defense and hours of Economics 399 are assigned the grade ultimately assigned to the dissertation. Students may take courses outside the Department of Economics as part of the 72 hours required for the degree, if permitted by the DGS and approved by the Graduate School.

B. Transfer of Credit. Students who have done graduate work in economics at other schools may request transfer credit for certain graduate courses taken there. In order for a course to qualify for transfer credit, certain conditions must be met: (1) it must have been taken at an accredited graduate school for graduate credit; (2) the student must have received at least a B- in the course; and (3) the Department must be satisfied concerning the intellectual quality of the course. Note that grades earned in transferred courses do not affect a student's graduate school Grade Point Average.

IV. Course Work

A. General Considerations and Requirements. Students seeking the Ph.D. degree must take at least 24 hours, and usually take closer to 51 hours, of formal coursework in economics and related disciplines, including at least four field courses and another field or topics course. These courses fall into three general categories: (a) courses needed to help prepare the student for the written preliminary examinations in microeconomic theory, macroeconomic theory, and the student's two elective fields of specialization; (b) courses taken to satisfy the Department's requirements in mathematics, statistics, and economic history or the history of economic thought; and (c) free electives. A minimum Grade Point Average of 3.0 in all course work is required for graduation; a grade of B or higher is also needed in each of the required courses in category (b) above except for mathematics (see sections B and C below).

B. Meeting the Requirement in Microeconomics. A student must pass the prelim in Microeconomics as specified in Section V, part C, based on Economics 304a and 304b. Further, the student must meet a departmental microeconomics requirement by one of the following methods:

- (a) passing Economics 304c (previously, Economics 331) with a grade of B or better.
- (b) obtaining a written statement from the faculty member who taught the course the last time it was offered of the faculty member who is teaching or will next teach the course (if it is not in progress) that a transferable course satisfies the requirement.
- (c) passing with a grade of B or better, an examination equivalent to a comprehensive final examination in the course. The student may do this by taking the final examination scheduled for the course or by taking a special examination during the periods in which prelim examinations are administered as determined by the DGS in consultation with the relevant faculty. The maximum number of tries is three under options (a) and (c).

C. Meeting the Requirement in Macroeconomics. A student must pass the prelim in Macroeconomics as specified in Section V, part C, based on Economics 305a and 305b. Further, the student must meet a departmental macroeconomics requirement by one of the following methods:

- (a) passing Economics 305c (previously, Economics 376) with a grade of B or better.
- (b) obtaining a written statement from the faculty member who taught the course the last time it was offered of the faculty member who is teaching or will next teach the course (if it is not in progress) that a transferable course satisfies the requirement.
- (c) passing with a grade of B or better, an examination equivalent to a comprehensive final examination in the course. The student may do this by taking the final examination scheduled for the course or by taking a special examination during the periods in which prelim examinations are administered as determined by the DGS in consultation with the relevant faculty. The maximum number of tries is three under options (a) and (c).

D. Meeting the Requirement in Statistics. A student may meet the departmental requirement in statistics by:

- (a) passing Economics 307 and Economics 309 with a grade of B or better.
- (b) obtaining a written statement from the faculty member who taught the course the last time it was offered or the faculty member who is teaching or will next teach the course (if it is not in progress) that a transferable course satisfies the requirement.
- (c) passing with a grade of B or better, an examination equivalent to a comprehensive final examination in the course. The student may do this by taking the final examination scheduled for the course or by taking a special examination during the periods in which prelim examinations are administered as determined by the DGS in consultation with the relevant faculty. The maximum number of tries is three under options (a) and (c).

Satisfying the requirement in statistics fulfills the formal Graduate School requirement of a minor for the Ph.D. degree in Economics.

E. Meeting the Requirement in Economic History or the History of Economic Thought. A student may satisfy this requirement by:

- (a) passing Economics 371 or Economics 262 with a grade of B or better. Graduate students taking Economics 262 are expected to write an additional research paper on an aspect of the history of economic thought.
- (b) obtaining a written statement from the faculty member who taught the course the last time it was offered or the faculty member who is teaching or will next teach the course (if it is not in progress) that a transferable course satisfies the requirements.
- (c) passing with a grade of B or better, an examination equivalent to a comprehensive final examination in the course. The student may do this by taking the final examination scheduled for the course or by taking a special examination during the periods in which prelim examinations are administered as determined by the DGS in consultation with the relevant faculty. The maximum number of tries is three under options (a) and (c).

F. Meeting the Requirement in Mathematics. At least one year of calculus before entering the Ph.D. program is the

prerequisite for Economics 300 (Selected Topics in Mathematics for Economists) and is enforced by means of a placement test in calculus and analytic geometry taken by all students entering the program. Students who pass it enroll in Economics 300. Students who do not should make up their deficiency in calculus by self-study or by taking calculus courses (which do not carry graduate credit) in the Mathematics Department, either in the regular academic year or the summer school. Having remedied this deficiency, students can retake the calculus placement test. Students who do not pass this test the first time can expect some delay in the completion of their course requirements.

To meet the math requirement, students are normally required to take Economics 300 (Selected Topics in Mathematics for Economists) and earn a grade of C or better. The following exceptions apply:

1. A student may petition the Department to substitute two selected courses in the Mathematics Department for Economics 300. The substitute courses must be approved in advance by the DGS.

2. A student may transfer from another institution at least two appropriate math courses with a grade of C or better, subject to the approval of the DGS. Only work with a grade of B- or better are considered for transfer credit toward the 72-hour degree requirement under Graduate School regulations.

3. A student may be excused from Economics 300 by passing a special examination on the subject matter of that course. The exemption examination is given at the beginning of each semester by the instructor in charge of the course, and there is no academic penalty or stigma for failing it, nor is a failure recorded on the student's transcript.

4. A student may obtain a written statement from the faculty member who taught the course the last time it was offered or the faculty member who is teaching or will next teach the course (if it is not in progress) that a transferable course satisfies the requirements.

G. Free Electives. Most graduate students will wish to take some free elective courses while at Vanderbilt. Often such courses will lie in areas of special interest outside the elective fields of specialization.

V. Field Requirements

A. General Description

Students in the Ph.D. program are required to pass written preliminary examinations in microeconomics and macroeconomics and to show competence in two elective fields before they may take the oral qualifying examination for admission to candidacy (see Part VI).

Competence in the two elective fields is shown as follows. Field 1 is satisfied by passing a written prelim. Field 2 is satisfied by passing a written prelim or passing the courses that students usually take to prepare themselves for the field, with grades of B or better in each course (the grade write-off). Thus, a student may satisfy this requirement with two written prelims or one prelim and a grade write-off.

Competence in a field with only one course numbered above 300 associated with it, or a field offered by petition, must be demonstrated by a written prelim. Finance is offered by the Owen Graduate School of Management; see Section B.

Students are strongly encouraged to consult with the DGS and their faculty advisors when selecting fields of specialization and the field or fields in which to take a written prelim. Since many faculty are reluctant to direct the dissertation of a student who has not taken the prelim in the relevant field, one should plan to take the prelim in the field most appropriate for the dissertation research. The Department does not assure that a committee can be formed for a student who plans to write a dissertation in a field in which she or he did not take the prelim. See Section B for the rules concerning the field of Finance.

The elective fields of specialization are normally chosen from the following list: Advanced economic theory, Econometrics, Economic growth and development, Economic history, Finance, Industrial organization, International economics, Labor economics, Money and financial institutions, Public finance. Other elective fields may be offered by petition.

The courses that students usually take to prepare themselves for the prelims in the required and elective fields are listed in two supplementary tables at the end of this document. It should be stressed, however, that preliminary examinations for the Ph.D. degree cover fields of economics, not specific courses. These prelims may require the student to show familiarity with parts of the relevant literature of each field not assigned in any particular course. Moreover, the attainment of high course grades does not guarantee that students will

pass the related prelims. The capacity to frame research problems and attack them successfully may also not be strongly related to performance in courses or prelims.

B. The Field of Finance

Finance is offered by the Owen Graduate School of Management. Ph.D. students in the Department of Economics wanting to take Finance to satisfy a field requirement must complete courses designated by the Committee on Graduate Studies, in consultation with the finance Ph.D. program coordinator. At least six credit hours must be required, but more can be required. Grades of B or higher are required in all such courses.

Ph.D. students in the Department of Economics who plan to write a dissertation in Finance must satisfy the following requirements. (1) The student must obtain the approval of the Ph.D. program coordinator in Finance and the DGS in the Department of Economics. (2) The student must complete courses designated by the Committee on Graduate Studies, in consultation with the Ph.D. program coordinator in Finance. At least six credit hours must be required, but more can be required. Grades of B or higher are required in all such courses. (3) The student must pass the Finance preliminary examination. (4) The student must obtain the agreement of a faculty member to chair the dissertation.

C. Written prelims

The written preliminary examinations are designed to test the student's familiarity with theoretical analysis, critical knowledge of his fields of special interest, and competence in analyzing the economic problems peculiar to those fields. Prelims are held under the rules of the Honor System and without access to the literature or to notes or counsel of any sort. Micro and macro prelims are offered in late May (and as of September 2001, infrequently, in late August; see item 3 below) and field prelims are offered in late August and between the first and second semester of each academic year (note: as of September 2003, field exams will only be available in August)..

The following regulations govern the taking of written preliminary examinations:

1. Students in the Ph.D. program are required to take both theory examinations in May of their first year in the program. This requirement applies to students who enter the program without deficiencies necessitating remedial work in their first year. Otherwise, students are required to take one theory examination in late May of their first year and the other theory examination in late May of their second year. The rationale for this regulation is to induce early completion of the students' basic preparation in economic theory so that they may begin work on the thesis as early as their third year.
2. If a student fails either of the theory examinations, he or she will be required to take it the following May. Failure to take the exam in the first May will result in an automatic failure of that examination; for those failing the exam in the first May (either an automatic or grade-based failure), failure to take the exam in the following May is an automatic failure of the missed examination. During the intervening period the student should sit in both courses of the relevant theory sequence. The student has two tries to pass each of the theory examinations. If the student fails either examination two times, he or she will not be admitted to candidacy for the Ph.D., subject to the appeals process below.
3. Students may appeal an automatic theory prelim failure to the COGS; such an appeal must occur within two weeks of the date the exam was given. Students may also appeal a grade-based second failure of a May theory prelim to the COGS; such an appeal must occur within one week of the release of grade results. Successful appeals will generally result in a retake being scheduled for the August following the May exam appealed. In all cases, the student bears the burden of showing that substantial and exceptional extenuating circumstances warrant allowing an August retake.
4. The marking scheme for any prelim is pass, marginal fail, and fail. Pass with distinction is also allowed. A student has only two tries to earn a passing grade in an elective field examination. The choice of prelims is left up to the student, subject to the two-try limit.

VI. The Oral Qualifying Examination on the Dissertation Prospectus and the Formation of Dissertation Committees

Within one year of completing the written preliminary examinations and the write-off requirements, students are expected to take an oral qualifying examination for admission to candidacy. (See Section X.) The latter examination consists of an oral defense of a written dissertation prospectus. (For suggestions on how to find a dissertation topic, see the next section.) The written prospectus should include a clear and detailed statement of the central question or questions to which the research will be addressed, why this issue merits research, the specific hypotheses to be tested, and the data and methods of analysis to be used in the study. The prospectus should include a brief

summary of previous research on the topic.

In choosing the topic of the doctoral dissertation, students may also select the chairperson of their dissertation committee, providing that the selected professor agrees to act as chairperson. On the advice of the committee chair, the student then approaches other faculty members, requesting them to serve on her or his committee. Account will also be taken of faculty research interests and the subject matter of the proposed thesis topic, along with the existing assignments of faculty on doctoral thesis committees and other departmental matters.

The written proposal must be made available by the student TO ALL MEMBERS OF THE COMMITTEE at least 21 days prior to the oral qualifying examination.

On recommendation of the Department, the Dean of the Graduate School formally appoints the dissertation committee to conduct the oral qualifying examination. The Committee consists of five or more faculty, at least four of whom must be faculty in the Department of Economics with at least one member from outside the Department.

A student shall have two tries in which to pass this examination, unless the chair of the student's committee, the majority of the student's committee, the Committee on Graduate Studies, and the faculty approve an appeal to allow an additional try based on extenuating circumstances and the prospect of success. Passing requires the affirmative votes of a majority of the committee.

Current Graduate School rules specify a maximum time limit 8 semesters from matriculation till the qualifying exam.

VII. Research Seminars and Workshops

Two goals of graduate education in economics are the development of proficiency in theoretical and applied economics and the ability to do economic research. The second goal is the more difficult of the two. The intellectual challenge of selecting a topic on which one wishes to do independent research, discovering its suitability as a dissertation topic and making substantial progress in economic research are essential parts of the education of an economist. Third and fourth year students are encouraged to present their preliminary research findings in a workshop. To learn about current research topics, problems, and methods, and to learn how to present seminars, all students should attend seminars by local students and faculty as well as visiting scholars. The research course Economics 398 requires attending seminars and meeting speakers and may require seminar presentations.

VIII. The Dissertation

A. Rules and Suggestions. Students are encouraged to try out possible ideas for a dissertation topic on faculty members and fellow students during their period of study at Vanderbilt and particularly while preparing for the preliminary examinations.

The doctoral dissertation is an original and penetrating treatment of a significant economic problem in any field offered by the Department. Independent research and its presentation in a scholarly document are major steps in the transformation of a student into a scholar. In most cases, they provide a basis for scholarly output in the early years of the career of an economist, and in some cases, they set the direction of one's life work. Only by pursuing independent research do investigators become aware of subtleties in economic concepts and acquire skill in analyzing practical problems with the aid of theoretical tools.

Once a dissertation committee has been formed, it is the student's responsibility to keep all members of the committee regularly informed as to the progress of the dissertation. It is strongly recommended that the student provide all members with written periodic progress reports. These may be very brief; their purpose is to keep the committee members apprised of the status of the dissertation.

When the student is ready to defend the dissertation, the dissertation chairperson will notify the DGS and the Department Chairman at least 21 days prior to the final defense. At the same time, a copy of the thesis and thesis abstract must be made available to non-committee faculty members in the Department Office.

The dissertation must conform to the rules governing style and appearance prescribed by the Graduate Faculty, a copy of which may be obtained from the Registrar of the Graduate School. (The Department has secured approval of the style of the American Economic Review.)

According to the current regulations of the Graduate School, the dissertation must be completed within four years after the student passes the oral qualifying examination and is admitted to candidacy. (A five-year limit applies to students who entered the graduate program at Vanderbilt before the fall of 1977.) A limited extension may be granted in cases when the candidate has worked full time since being admitted to candidacy.

B. The Final Examination -- Defense of the Dissertation. The candidate's final examination is oral and based on the dissertation and the broader context within which it lies. In addition to the student's continuing committee, the Graduate Dean may invite a representative of the Graduate Faculty Council to be present. The date of this examination is announced in advance, and the University community is invited to attend it. Passing requires the affirmative votes of a majority of the committee.

C. Publication of the Dissertation. If the dissertation is accepted, the Graduate School's requirement that it be published may be met by having it microfilmed. Two copies of the dissertation and two copies of an abstract, not more than 350 words in length, prepared by the candidate, must be registered in the office of the Dean of the Graduate School. The Dean will present the two copies of the dissertation to the Vanderbilt University Library. The abstract will be published in Dissertation Abstracts, publicizing the completion of the dissertation and its availability on microfilm or otherwise.

IX. Option for the M.A. for Ph.D. Students

Students who have completed at least 42 semester hours of Ph.D. course work with an average of at least B or better may be granted the Master's degree without completing a separate M.A. thesis. Qualified students desiring this option for the M.A. should so petition the DGS at least six weeks prior to the commencement in which they wish to receive the M.A. degree.

X. Financial Aid and Adequate Progress

A. A Statement on Graduate Financial Support in Economics

Graduate Financial Support. This is a statement of procedures followed by the Department of Economics and Business Administration regarding the funding of Ph.D. students. This statement is neither a Vanderbilt University nor a College of Arts and Science policy nor a legally binding contract.

Who is Eligible? Vanderbilt's graduate financial support may be granted to Ph.D. students for up to five years inclusive from the date of matriculation. M.A. students are not funded. Although funding is not guaranteed, it is rare for students who are making adequate progress to be denied four years of funding. Students with funding from another source are ineligible for aid from Vanderbilt.

If funds are available after supporting all students making adequate progress up to the fifth year, funding may be extended to other students in the Ph.D. program. In all categories of students to be funded, academic and teaching performance are both used to determine preference.

When Does the Period of Funding Eligibility Begin? Students' funding eligibility begins at the date of matriculation following formal admission to the Ph.D. program at Vanderbilt. Courses taken elsewhere may be transferred if the DGS and the Chair of the Department so recommend, and the Graduate School approves, but this does not affect eligibility for aid. Graduate courses previously taken by students at Vanderbilt count toward the hours requirement, but do not affect eligibility for aid, except Ph.D. courses: six to twelve hours reduce eligibility by one semester, fifteen hours or more reduce eligibility by two semesters. Years self-financed or supported by non-Vanderbilt sources following matriculation to the Ph.D. program count toward the limitation of five years.

Funding Limits (72 hours). A full T.A. pays tuition for not more than 72 hours of courses and research hours. Residency requires at least 24 hours of courses, and departmental regulations require 27 additional hours of courses. Permanent Incompletes and withdrawals officially after the full-refund date count against the 72 hour limit of funding, and additional courses needed to reach 72 hours are the financial responsibility of the student.

B. Definition of Adequate Progress. Adequate progress is defined as follows based on the number of semesters following matriculation to the Ph.D. program. The Committee on Graduate Studies determines after each semester which students are making adequate progress.

After one semester, adequate progress requires a minimum average of B (3.0).

After two semesters, adequate progress requires passing both Macro and Micro prelims and maintaining a minimum average of B (3.0).

After four semesters, adequate progress requires passing both Macro and Micro prelims and maintaining a minimum average of B (3.0).

After six semesters, adequate progress requires the completion of all 72 hours of courses and research with no incompletes, and

the completion of field requirements, unless one or both of the student's fields were not offered in the student's second year. In that case, adequate progress requires a minimum average of B (3.0) in the relevant courses.

After seven semesters, adequate progress requires passing all field requirements and a dissertation proposal defense.

After eight semesters, adequate progress requires certification from the student's dissertation advisor that satisfactory progress is being made towards completing the Ph.D. degree.

C. Students Who Have Passed All Prelims But Not Passed a Proposal. Such students must present to the DGS evidence of progress toward a proposal, including the name of the faculty member who will be the chair.

D. Preference in Funding and 20-Hour Assignments

Students who are making adequate progress are funded in preference to those who are not. Others may be funded if money remains unallocated.

In general, students making adequate progress will be offered 20-hour assignments in preference to those who are not. However, teaching performance is also considered and those whose performance is sub-par may be denied aid.