Graduate Study Guide

DOCTOR OF PHILOSOPHY IN ECONOMICS MASTER OF ARTS IN ECONOMICS

The purpose of this guide is to describe the requirements and procedures established by the University Graduate School and the Department of Economics governing a student's progress toward the Master of Science degree in Economics. Many of the detailed requirements of the University Graduate School are not reproduced here. For those, the student should consult the <u>University Graduate School Bulletin</u>.

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I. GENERAL INFORMATION

A. ADMISSION REQUIREMENTS

The following preparation is required:

- (1) 25 hours of social science, including a course in intermediate microeconomic theory (the corresponding Indiana University course is ECON-E 321) and intermediate macroeconomic theory (the corresponding Indiana University course is ECON-E 322);
- (2) a mathematics preparation in calculus and linear algebra (see the following paragraph);
- (3) submission of acceptable scores on the Graduate Record Examination (verbal, quantitative, and analytical sections);
- (4) three letters of recommendation, transcripts of course work, and other materials as required by the Graduate School and International Admissions Office.

Applicants are expected to take at least 3 semesters of differential, integral, and multivariate calculus plus some coursework in linear algebra and probability theory <u>before</u> entering the graduate program. The corresponding Indiana University courses are numbered MATH-M 211-M 212 (Calculus I and II), MATH-M 303 (Linear Algebra), MATH-M 311 (Calculus III), and MATH-M 463 (Introduction to Probability Theory I) in the Department of Mathematics.

B. TRANSFER OF CREDIT

After completing one semester in residence at Indiana University with the approval of the Director of Graduate Studies (DGS), candidates for the M.A. or M.A.T. degrees may transfer up to 8 hours of graduate credit from other institutions; Ph.D. candidates may transfer up to 30 hours of graduate credit. Students must obtain the written consent of both the Graduate Studies Committee of the Department of Economics and the Graduate School Dean before credit earned at other institutions will be added to their record. Courses offered for transfer of credit must have been completed with a grade of B or better.

C. REGISTRATION AND COUNSELING

Prior to admission to Ph.D. candidacy, counseling is available through the Graduate Studies Committee (see section G). Specific sources of counseling are the following:

- 1. The DGS or members of the Graduate Studies Committee on matters pertaining to status, progress, and financial assistance;
- 2. Faculty members associated with fields in which students expect to write qualifying examinations for the Ph.D. degree.

The Graduate Studies Committee will review the work of each graduate student every year until the student is admitted to candidacy. Students will be notified if there are any problems with respect to their status as a graduate student in good standing.

After admission to Ph.D. candidacy, a student's thesis research committee will be their primary source of guidance (see part II, section H).

New Students. New students will meet with the DGS in the Department of Economics regarding their course selections. The graduate coordinator will schedule these meetings and can answer many questions. New international students are required to take the Indiana Academic English Test (IAET) administered by IU's Department of Second Language Studies prior to registration. Based on test results, English proficiency courses may be required. The University Graduate School will not award an M.A. degree or admit to Ph.D. candidacy anyone who has not undertaken and passed the requisite courses.

Continuing Students. Ph.D. students who have not yet passed both core exams (see Section II below) should consult with the DGS. The graduate coordinator will schedule meetings. Students who have passed the core exams are encouraged to consult the DGS concerning their course schedule. Students may not register for more than 12 hours without approval by the DGS.

In order to facilitate course scheduling, the continuing students are required to pre-register for the following semester at the Department's office. Pre-registration will take place in October and March.

D. <u>UNDERGRADUATE COURSES AND GRADUATE CREDIT</u>

Undergraduate courses that have been approved by the Graduate School for graduate credit are listed in the <u>University Graduate School Bulletin</u>. However, the final decision to admit a graduate student to such a course is left to the instructor. Students planning to register for one of these courses should consult with the instructor and the DGS.

E. FINANCIAL ASSISTANCE

These include *Graduate Fellowships*, *Associate Instructorships*, and *Graduate Assistantships*, all of which usually include tuition fee remissions. The Department attempts to provide financial aid to all continuing Ph.D. students in their second through fifth years who are making satisfactory progress toward the Ph.D. degree, whose overall performance in the program is strong, and who are able to serve as an Associate Instructor or Graduate Assistant. Satisfactory progress is defined below (Section II.I). Financial aid beyond the fifth year depends on student progress toward the Ph.D. degree and is made on a case by case basis, depending on Departmental need. M.A. students are not generally funded.

Graduate Fellowships. Graduate fellowships are offered to a small number of exceptional students. The stipends attached do not require specific duties, and the amount of the fellowship actually used to pay the cost of tuition, course fees, and course-related books, supplies, and equipment is excludable from taxable income. All fellowship recipients must be enrolled full time (see below). Students may receive a graduate fellowship in addition to an assistantship appointment or a fee scholarship.

Teaching Assistantships and Associate Instructorships. Teaching Assistantships (TAs) and Associate Instructorships (AIs) are the primary form of financial assistance for continuing students. Normally, TAs assist a faculty member in teaching undergraduate or graduate courses and may be responsible for leading discussion sections. Teaching assignments for AIs may include full responsibility for teaching their own course. These courses include a broad group of undergraduate courses, normally beginning with introductory economics and statistics. All

Ph.D. students who want to be considered for TA or AI positions must take ECON-E 502 (Teaching Undergraduate Economics) prior to a TA or AI assignment and complete the course with a B- or better grade. In addition, students whose native language is not English cannot be TAs or AIs until they pass the Test of English Proficiency for Associate Instructor Candidates (TEPAIC) or SLST-T 502 (Communication Skills for International Associate Instructors).

We strongly encourage incoming students to take the TEPAIC in August. Students who fail the exam are expected to work on improving their English in order to retake the TEPAIC, which is offered four times per year. Students who receive an NC4 (Not Certified) on the TEPAIC are eligible to enroll in SLST-T 502 (Communication Skills for International AIs). ECON-E 502 and SLST-T 502 are each worth three hours of graduate credit. However, these hours cannot be used to satisfy the minimum credit hours requirement in Economics for the Ph.D. degree. (See II, A below.)

Graduate Assistantships. Graduate Assistants are assigned to aid specific faculty in their teaching and research. As a rule, the Department limits appointments to GA positions to at most 3 years.

Tuition Fee Remissions. Continuing graduate students are eligible for a tuition fee remission if they are (i) enrolled in the Ph.D. program, (ii) in good academic standing, (iii) making satisfactory progress toward the Ph.D. degree, and (iv) appointed as an AI or GA at .375 full-time equivalent (FTE) or greater. Satisfactory progress is defined in Section II.I below. Priority will be given to students in their first five years in residence. Students who have accumulated 90 hours or more and who have completed all course requirements are not eligible for tuition fee remissions but may enroll in G901 (see below). The Department will award tuition fee remissions to students who have completed five or more years in residence in very special cases and only after intense scrutiny by the Graduate Studies Committee.

It is our understanding that tuition fee remissions and fee scholarships are not taxable. Summer tuition fee remission and fee scholarship awards are restricted to a maximum of six hours. Tuition fee remissions and fee scholarships are restricted to a maximum of 30 hours in any 12-month period.

Additional Rules

AI/GA Appointments. The stipends attached to AI and GA appointments are considered graduate student support and compensation for the academic duties assigned, and as such are taxable income.

The following enrollment requirements apply:

- a) All graduate students on academic appointment at or above .375 FTE must enroll for at least 6 credit hours each semester on appointment. Students on summer appointments have the option of enrolling in a minimum of 4 credits to be exempt from FICA payments.
- b) Students appointed at less than .375 FTE must enroll for at least 1 credit hour each semester on appointment.

Post 90-hour Assistantships. All doctoral candidates who have accumulated 90 hours or more in course work and deferred dissertation credits and who are offered a graduate

academic appointment at or above .375 FTE must enroll in 6 credit hours each semester. If all course and degree requirements have been completed, candidates may enroll in ECON-G 901 Advanced Research which carries a value of 6 credit hours. There is a flat fee of \$150 for this course.

Course Loads. The normal course load for a graduate student who is not employed is 12 hours. Full time status requires enrollment in at least 8 credits. Permission of the DGS is required for any student who wishes to take more than 12 credits.

Employment. University regulations limit the appointment of graduate students in all work activities to .50 FTE (20 hours per week). Approval from the Department and the Dean of Faculties for an FTE overload must be obtained by the student prior to accepting a position that creates the overload. Approval for FTE overloads will be granted only in exceptional circumstances.

Summer Appointments. A limited number of summer AI and GA appointments are available. These funds are allocated on the basis of scholarly research and teaching performance.

F. GRADUATE AND PROFESSIONAL STUDENT GOVERNMENT (GPSG)

The <u>Graduate and Professional Student Government (GPSG)</u> serves over 10,000 graduate and professional students at IU-Bloomington by providing academic support, community, advocacy, and graduate resources. The Department of Economics encourages Ph.D. students to nominate a student representative each year to this organization.

G. GRADUATE STUDIES COMMITTEE

The Graduate Studies Committee includes the Director of Graduate Studies and two or more other members of the faculty.

The duties of the Graduate Studies Committee are:

- 1. To develop, implement, and review the graduate study programs and policies of the Department of Economics.
- 2. To rule on applications for admission to graduate programs in Economics.
- 3. To review the progress of active degree candidates.
- 4. To rule on requests for financial assistance of the continuing graduate students.
- 5. To select fellowship recipients and other academic awards.

H. ACADEMIC PROBATION

When the grade point average of a student falls below 3.0, or the student is not making satisfactory progress toward the degree (for example, receives a failing grade for the third year paper or does not present a dissertation proposal on schedule), the DGS and the Graduate Studies Committee will recommend to the College of Arts and Sciences that the student be placed on academic probation. Unless the student brings their record up to a 3.0 grade point average or meets the satisfactory progress requirements in the next semester of enrollment, the DGS and Graduate Studies Committee will undertake a review and will recommend to the College further actions including probation for an additional semester and possible dismissal from the program.

I. ACADEMIC DISHONESTY

Academic integrity is fundamental to any graduate program. The Department Chair and the DGS will determine specific penalties for any acts of academic dishonesty. The Graduate Studies Committee has established the following rules for disciplinary action in cases of flagrant cheating or plagiarism.

- 1. Cheating or Plagiarism in Course Work and Field Exams: A failing grade is recommended (instructor's discretion). The student's eligibility for financial aid will be permanently terminated. In addition, the student may be expelled from the program.
- 2. Cheating or Plagiarism in writing Master's and Ph.D. Theses: The student will be expelled from the program without a degree.
- 3. Anti-Plagiarism Monitoring Policy: Graduate students submitting their Third Year Paper or scheduling their Ph.D. dissertation defense will be informed by the graduate coordinator about an assignment created in a relevant course in the university-approved platform (e.g., Canvas). The student will be required to submit their paper/dissertation to fulfill this assignment as a single file in PDF format. The student is required to submit the assignment by the Third Year Paper due date, or at least 5 business days prior to the dissertation defense date, whichever is applicable. The originality report will be provided to the chairperson(s) of the student's Third Year Paper Committee or Ph.D. Dissertation Committee.

The Graduate Program in Economics follows Indiana University policies and procedures concerning the cases of academic dishonesty such as plagiarism, cheating, and fraud. Information on Indiana University policies and procedures on these matters can be found in the IU Academic Handbook and the Indiana University Code of Students Rights, Responsibilities, and Conduct.

II. REQUIREMENTS FOR THE PH.D. DEGREE

A. GENERAL

The Ph.D. degree is conferred upon the successful completion of an advanced course of study that includes 90 hours of graduate credit, plus 9 tool skill credits (99 total credits), and a successful defense of a Ph.D. thesis. Courses used to fulfill a tool skill do not carry graduate credit. An average grade of B (3.0) must be maintained. Failure to maintain a GPA at 3.0 or above will result in Academic Probation (see Section I.H above). Courses completed with grades below a C (2.0) are not counted toward degree requirements but are used in GPA calculations. There is a minimum requirement of 60 credits of course work.

These credits must include at least: 57 economics graduate credits +3 credits ECON-E 502 Teaching Undergraduate Economics.

The graduate credits must include at least: 48 graduate economics credits, +9 workshop credits (57 total).

If a student enrolls in more than 60 graduate course credits, the ECON-E 809 Thesis Ph.D. credits are reduced accordingly.

Those who wish to transfer graduate work from other institutions may submit a request to the Graduate School, via the Graduate Studies Committee of the Department, after one semester in residence at Indiana University. With approval, a student may transfer up to 30 hours of credit. The minimum residence requirement for the Ph.D. is two consecutive semesters during one academic year on the Bloomington campus.

B. COURSE WORK

Core Theory. Ph.D. students are required to take ECON-E 520, ECON-E521, ECON-E522, ECON-E621, ECON-E 622 (or equivalent) and pass examinations in macroeconomic and microeconomic theory. The macroeconomic and microeconomic core exams will ordinarily be taken at the end of the first year in residence. The exams are given in May with a retake in July or August. A maximum of two attempts will be permitted on each exam. Passing both exams is a prerequisite for continuation in the Ph.D. program. Unless there are extenuating circumstances and prior DGS approval, failure to sit for a core theory examination as scheduled will result in failure of the examination.

Statistics and Econometrics. ECON-E 571, ECON-E 572 and ECON-E 671 are required for all Ph.D. students.

C. THIRD-YEAR PAPER REQUIREMENT

Ph.D. students are required to write a substantial research paper by the end of their third year in the program. It is preferable that this paper be solo authored. Although co-authorships with faculty advisors are permitted, it is expected that the student will be the main contributor. The goal should be that this paper is of sufficient quality to be the first essay of the dissertation. Please read carefully the detailed procedures and schedule for the implementation of the paper requirement outlined in *Appendix A1. Third Year Paper Procedures and Schedules*.

A student must select a topic for the third-year paper and, in consultation with the DGS, form a Preliminary Advisory Committee during the fall semester of their third year in the program.

Once the Preliminary Advisory Committee is formed, the student will submit an e-Doc to assign their Advisory Committee for the Committee, Department, and College of Arts and Sciences approval. The Committee will oversee the student's progress on the paper and will ultimately evaluate it. In case of co-authorship, the evaluation must apply to the student's contribution. The Committee must have at least three members, including the chairperson. At least two Committee members should be full-time members of the department faculty. Permission of the DGS is required for including any Committee members from outside the department.

A preliminary draft of the paper should be essentially ready in April and presented at the annual departmental annual Conference. The final draft of the paper should be submitted to the Committee, which will assign a grade no later than by the end of the first summer session (see Appendix A for details of the schedule)

A failing grade will indicate the student's failure to make satisfactory progress towards the degree. The options to do remedial work during their 4th year in the program as well as consequences of failure for the department's financial aid commitment are laid out in Appendix A. Students who do not pass the Third-Year Paper requirement by the end of their 4th academic year in the Ph.D. program will be disqualified from continuation in the program.

D. TOOL SKILL OPTIONS

The Department of Economics strongly recommends that Ph.D. students plan to complete their tool skill requirements during the third year. Proficiency must be demonstrated in one tool skill, which may be either Econometrics/Applied Statistics, Mathematics, Operations and Decision Technologies, or Computer Science. A student must choose one of these fields and obtain at least 9 credits in it. Courses used to fulfill a tool skill requirement do not carry graduate credit. Tool skill courses must be passed with a grade of B or better. All tool skill course selections must be approved in advance by the DGS. The following options are available:

- 1. *Econometrics/Applied Statistics*. Students can use econometrics courses beyond ECON-E 571, ECON-E 572 and ECON-Es 671, and other Econ courses with significant econometrics content for the tool skill option. Applied statistics courses outside of the Department of Economics can be used with the approval by the DGS (e.g., STAT 625, STAT 626).
- 2. *Mathematics*. Courses at the 400 level or above that are listed in the University Graduate School Bulletin and approved by the DGS in advance may be used.
- 3. *Operations and Decision Technologies. Courses* chosen in coordination with the DGS.
- 4. *Computer Science. Courses* chosen in coordination with the DGS (e.g., CSCI-A 597, CSCI-B 555, CSCI-A 565).
- 5. Previously taken graduate courses will be considered upon DGS's approval.¹

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¹ Before requesting approval from the DGS, make sure the requirements listed are met. The graduate coordinator can assist in reviewing the coursework for eligibility. The DGS will require the syllabus and the title of the textbook to take a course under consideration. If the DGS believes the course content of a particular course is sufficient to fulfill the requirement, the DGS will notify the student and graduate coordinator of the course(s) allowed to be used toward the degree requirement fulfillment. Please see specific instructions for Math courses in Appendix A2.

Requirements to consider prior coursework:

Must be a graduate level course

Must not have been used toward a bachelor degree

Must have been taken within an allowed time period (for MA: within 5 years of the MA degree date; for PhD: within 7 years from the date of the third year paper grade)

Each course considered must be at least 3 credit hours

Must have earned a grade of "B" or better

In special circumstances, tool skill waivers can be considered on a case-by-case basis 6. for students who have extensive background in a particular tool skill area (e.g. Graduate Degree(s) in that discipline). To have prior graduate coursework considered, email the graduate coordinator and the DGS.

E. DEPARTMENTAL WORKSHOPS

The Department offers a series of workshops each year. Most of these workshops will be on a continuing basis, but some may not be offered every year. The current workshops are: Microeconomics, Macroeconomics, and Econometrics.

The workshop schedule is posted under News + Events on the Department of Economics website.

The purpose of the workshops is to enhance the research environment of the Department. For students, a workshop is a forum to develop a research topic and present a thesis proposal. Properly used, a workshop will enable a student to reach the thesis phase of graduate training much more smoothly than would otherwise be the case. Procedures for student participation in workshops are as follows:

1. Students are <u>required</u> to join a workshop of their choice after passing their core theory exams. They are expected to remain associated with a workshop as long as they are in residence. In addition, starting in their third year at the latest, students have to formally enroll in a workshop <u>course</u> for 3 semesters.

The courses corresponding to each workshop are:

Microeconomics	ECON-E 724	Adv Microeconomics Seminar	3 credits
Macroeconomics	ECON-E 724	Adv Macro Seminar	3 credits
Econometrics	ECON-E 724	Econometrics Seminar	3 credits

These courses will be offered regularly. The goal of the workshop courses will be to give students a more hands on view of research, including discussions of research techniques and specific ongoing research projects. The course grade will be based on a substantial written project or project of instructors choosing.

- Workshop association may be changed at the beginning of any semester, or at other 2. times with permission from the DGS.
- In addition to their primary workshop, students are strongly encouraged to attend other 3. departmental workshops.

F. FIELDS AND QUALIFYING EXAMINATIONS

The Ph.D. candidate must successfully complete at least three fields: one primary field and two supporting (secondary) fields. However, students are allowed to pursue two fields as primary, in which case one supporting field will be required. With the DGS's approval, one of the two supporting fields may be taken outside the Department of Economics. All field selections, along with the course work to satisfy them, must be approved in advance by the DGS.

Qualifications for all fields, primary and supporting, require coursework according to the Department's guidelines listed below. To qualify for a field, the student must obtain grades of B or higher in all the corresponding courses. A course cannot be counted by a student toward more than one field. Similarly, courses taken to satisfy the field in Econometrics cannot be simultaneously used to meet an optional tool skill requirement in Econometrics. Students contemplating qualification in a particular field must consult with faculty members teaching in that field. With the DGS's approval and the relevant faculty a student can choose a customized field by combining courses from two different fields (for example Monetary Economics and Macroeconomics).

Qualification for the primary field also requires a qualifying examination. A maximum of two attempts is permitted for each primary field.

In order to meet the criteria of *satisfactory progress* toward the degree (see part I.), a student must complete all field requirements by the end of their third year in the program.

Note. If all courses required for the student's primary field are offered while the student is in their second year in the program, the student is expected to complete the coursework in that year. As a rule, the student must then take the qualifying exam when scheduled at the end of the academic year. Exceptions to this rule can be considered at the involved faculty's initiative and require approval by the DGS. If some of the required courses for the primary field are not offered during the student's second year of studies, and therefore must be taken during their third year, then the chair of the preliminary committee evaluating the student's third year paper can consider the following option: If the student writes the third year paper in their primary field, and shows in the committee's judgment significant progress and promise, the committee chair can offer the student the possibility of substituting an excellent performance on the paper for the qualifying exam requirement. To ultimately qualify for such substitution, the student will need a "high pass" grade on the paper. A lower grade will reinstitute the exam requirement.

Fields offered by the Department of Economics:

Advanced Economic Theory

Financial Econometrics

Time Series

Economic Growth

Experimental Economics

Games and Networks

Industrial Organization

International Trade

Macroeconomics

Monetary Economics

Public Economics

In addition, <u>Finance</u> is offered as a field in partnership with the Kelley School of Business. Two courses (6 credit hours) in Finance may be used as a *supporting field* and will count toward the economics graduate credit hour requirements. F600 (Asset Pricing Theory), F605 (Corporate Finance), F625 (Empirical Asset Pricing), F644 (Banking), F644 (Empirical Corporate Finance). If a student takes more than two courses (6 credit hours) in Finance, courses may be counted in the category of "other" courses toward the overall 90 credit hour requirement with the approval of the DGS. See Section II.A above.

Not all fields may be available in a given year and the Graduate Studies Committee with the DGS will systematically review the available field-course combinations and publish them on the graduate program's website. Please consult with the Director of Graduate Studies when determining the appropriate courses for your chosen fields.

G. NOMINATION TO CANDIDACY

A student will be nominated to Ph.D. candidacy after fulfilling all the course work and field requirements for the degree. This includes: (i) 60 credits of graduate course work, (ii) 57 credits in Economics which include three semesters (9 credits) of workshop courses, (iii) the tool skill requirement, (iv) successful completion of qualifying examinations in the primary field(s) and successful completion of the supporting field(s), and (v) passing the third year paper requirement. The effective starting date of candidacy will be the date of passing the last primary field exam or the date of passing the third-year paper requirement, whichever is later. A course will not count toward degree requirements if it has been taken more than seven years prior to the date of candidacy. Nomination to candidacy signifies that a student has completed all the requirements for the Ph.D. except the dissertation. A completed dissertation must be delivered to the Graduate School within seven years of the date of candidacy.

H. THESIS RESEARCH

The material below outlines the components of the student's thesis research. In addition, the student should read the attached appendix *Preparation for the Ph.D.* by Professors R. Becker, Gardner, and Spulber.

Dissertation research. Based on the Preliminary Advisory Committee (see part C above as well as Appendix A), a student must put together their full Ph.D. dissertation research committee in consultation with the DGS at least one month in advance of the official presentation of the dissertation proposal. The committee must have at least four members, including the chairperson(s), all of whom are members of the graduate faculty, and at least half of whom have the Economics Department's endorsement to serve on Ph.D. dissertation committees. The committee chair(s) must have the Economics Department's endorsement to chair Ph.D. dissertation committees; exceptions can be made on a case-by-case basis and require consultation with the DGS and the approval of the Dean of the University Graduate School. Upon presentation of the dissertation proposal, the committee must be approved by the Dean of the University Graduate School. Any substitutions in the committee members must have all of the above endorsements and approval.

Note. A student's *Nomination to Candidacy for the Ph.D. Degree Application* e-Doc (see section G above) must be approved by the University Graduate School prior to the Department's endorsement of their dissertation committee.

Thesis proposal. Working with his or her chairperson and the other members of the committee, a student will prepare a dissertation proposal and present it at the appropriate Departmental workshop. The proposal should cover the following items to the extent that they are relevant:

- a. Topic and literature review
- b. Analytical and/or theoretical methods
- c. Tests to be conducted
- d. Available sample data
- e. Relevance to theoretical or policy literature
- f. Committee composition

The written proposal should be distributed to the workshop participants prior to presentation. The proposal stage is completed when the proposal has been presented and the committee members and the University Graduate School have approved the *Ph.D. Nomination of Research Committee* e-Doc. A 1-2 page summary of the proposed research must be attached to this e-Doc.

Thesis defense. All committee members are to be informed of progress on the thesis as it is written so that they may be involved in the preparation and be familiar with the work at the time of defense. A complete draft of the thesis must be presented to each committee member prior to scheduling a defense. Any substantive difficulties with the work should be resolved at this time. The student will work with members of their committee to obtain approval to schedule the defense and determine a time and date when all the committee members can be physically present. When all members agree, the student will forward the information to the graduate coordinator, who will schedule the defense.

Any faculty member who withdraws at this stage should do so in consultation with the committee chairperson and the student. If differences cannot be resolved, an explanation should be given to the DGS and a *Ph.D. Research Committee Change* e-Doc must be submitted to the University Graduate School.

The *Ph.D. Defense Announcement* e-Doc must be submitted by the student at least 40 days prior to the dissertation defense. At the defense, the committee conducts a final oral examination primarily over the content of the thesis. Following a successful defense, the completed thesis is submitted to the University Graduate School.

An approved thesis must be delivered to the University Graduate School within seven years from the day of admission to candidacy. Failure to meet this requirement will result in the termination of candidacy and the student's enrollment in the degree program. Please consult with the Department's graduate coordinator concerning details of deadlines and requirements of the University Graduate School for the thesis and oral defense. The defense must be at least eight months after the last field exam is passed or the date of passing the third-year paper requirement (whichever is later), and at least six months after the University Graduate School has approved the *Ph.D. Nomination of Research Committee* e-Doc.

I. SATISFACTORY PROGRESS AND CONTINUING ENROLLMENT

The following timetable of the Department of Economics defines satisfactory progress toward the Ph.D. degree. Failure to make satisfactory progress toward the Ph.D. degree and maintain good academic standing (GPA at 3.0 or above) will result in academic probation and may lead to the loss of financial aid.

<u>First year</u>: Complete ECON-E 520, ECON-E 521, ECON-E 621, ECON-E 522, ECON-E 622, ECON-E 571, ECON-E572.

Pass micro and macro core exams.

Non-native English speakers: For consideration for TA or AI positions during the following academic year, pass the Test of English Proficiency for International Associate Instructor Candidates (TEPAIC) no later than March.

Second year: Complete ECON-E 671.

Complete course work for two fields.

Pass primary field qualifying exam(s) if the relevant courses are offered in the student's 2nd year.

Join a workshop.

Third year: Begin enrolling in a workshop course.

Form Preliminary Advisory Committee (fall). Complete all field coursework.

Pass primary field qualifying exam(s), if courses in the chosen field were not offered during the student's 2nd year.

Complete tool skill requirement. Complete third year paper requirement.

Fourth/Fifth year: Have at least one thesis chapter finished. Present thesis proposal.

Fifth/Sixth year: Job market and dissertation defense.

After admission to candidacy, the University Graduate School requires that a student enroll each fall and spring semester for thesis or research credit until the degree is completed (see Continuing Enrollment section in the University Graduate School's Academic Bulletin). If 90 hours of graduate credit have been completed, and all other requirements for the Ph.D. have been met, the student may enroll in ECON-G901 Advanced Research, each fall and spring semester until the degree is completed. Summer enrollment is not generally required unless the student graduates in June, July, or August. Failure to meet the continuous enrollment requirement will automatically terminate the student's enrollment in the degree program.

Note. Enrollment in G901 is limited to a total of six semesters and is available only in the fall and spring semesters. In rare circumstances, when completion of a degree requires additional time, a student should consult the graduate coordinator for instructions concerning course enrollment to ensure continuing registration until the degree is completed.

III. REQUIREMENTS FOR THE M.A. DEGREE

The Department is currently not admitting students toward a terminal Master of Arts Degree in Economics.

A. GENERAL

A candidate for the M.A. degree must present a minimum of 30 hours of graduate credit with a grade point average of at least B (3.0). Courses completed with grades below C (2.0) are not counted toward degree requirements, but such grades will be counted in calculating a student's grade point average. A minimum of 24 hours of work must be taken in the major subject area. This requirement must be met with courses taken in the Department of Economics. A minimum of 18 credit hours of course work or at least six courses in Economics (excluding thesis) must be numbered 500 or above. All work offered for the M.A. degree must be completed within 5 consecutive years.

1. Specific courses required by the Department of Economics

are: ECON-E 520 Optimization Theory (3 cr. hrs.)

ECON-E 521 Microeconomics (3 cr. hrs.)

ECON-E 522 Macroeconomics (3 cr. hrs.)

ECON-E 471 or ECON-E 571 Econometrics (3 cr. hrs.)

ECON-E 472 or ECON-E 572 Econometrics (3 cr. hrs.)

The 400-level ECON-E 471 and ECON-E 472 courses are intended only for terminal M.A. candidates.

2. E502 (Teaching Undergraduate Economics) carries Economics graduate credit for the M.A. Enrollment in E502 requires permission from the DGS and the course instructor.

B. TOOL SKILL AND THESIS OPTIONS

The M.A. candidate has the choice of either writing a thesis or completing 6 credit hours of course work in a tool skill to fulfill the tool skill requirement.

Thesis. The Department will allow up to 6 hours of graduate credit for thesis research (ECON-E 808) in meeting the requirements for the M.A. degree. Arrangements should be made through a thesis director appointed in consultation with the DGS. There are two additional readers for the thesis.

Tool Skill. The Master's students who choose the tool skill option have to take at least 6 credit hours of course work approved in advance by the DGS in Operations and Decision Technologies, Mathematics, Computer Science or Econometrics/Applied Statistics beyond E572. Courses used to fulfill a tool skill requirement do not carry graduate credit. Tool skill courses must be passed with a grade of B or better.

IV. OTHER DEGREES

A. MASTER OF ARTS FOR TEACHERS

Note. The Department is currently not accepting students to this program.

The Department of Economics offers an M.A.T. degree. The Graduate School requires 36 hours beyond the baccalaureate degree with at least 20 hours in the major teaching field. All degree requirements must be completed within 5 consecutive years.

Each candidate must possess a teacher's certificate by the time the degree is conferred, with the exception of international students for whom the Department of Economics will request a waiver unless they intend to teach in the United States. No thesis or foreign language proficiency is required. The Department will arrange an individual study program for each candidate, usually including only courses that may be taken for graduate credit. A comprehensive written examination covering course work in Economics will be given during the student's last semester in residence.

V. GRADUATE MINOR IN ECONOMICS

A candidate for a graduate degree in another department who elects to take Economics as an outside minor must take at least 12 hours of Economics from Indiana University Bloomington. Within these 12 hours, the candidate must take at least one semester each of Ph.D. level microeconomic theory and macroeconomic theory. In most cases, ECON-E 521 and ECON-E 522 must be taken to meet these respective requirements. In exceptional cases approved by the Director of Graduate Studies, based on a student's prior record, the ECON-E 521/ECON-E 522 requirement may be waived, and the higher level ECON-E 621/ECON-E 622 will satisfy the micro/macro theory requirement.

Within the 12 hours, the candidate must also take six additional hours of courses that carry credit for graduate degrees in Economics as listed in the Graduate School Bulletin. These courses must be selected in consultation with the Director of Graduate Studies. All courses taken to satisfy the requirements for an outside minor in Economics must be passed with a grade of B (3.0) or better. A separate written or oral examination will not be required.

Microeconomic and macroeconomic theory courses which may be used toward the minor:

ECON-E 521 Theory of Prices and Markets I (Microeconomic Theory I)

ECON-E 621 Theory of Prices and Markets II (Microeconomic Theory II)

ECON-E 522 Macroeconomic Theory I

ECON-E 622 Macroeconomic Theory II

APPENDIX A1

THIRD YEAR PAPER PROCEDURES AND SCHEDULES

- 1. Starting a research project. The third-year paper topic should be selected during the year's fall semester at the latest. The best framework for this can be interaction with the faculty in the student's field or other advanced graduate courses as well as the workshop course of their choice (as outlined in part II.E. Departmental Workshops of the Study Guide).
- 2. Preliminary advisory committee. During the fall semester, the student must form a preliminary committee, which will oversee the student's progress on the paper and will ultimately evaluate it. The student must first select the committee chair among the graduate faculty and then, in consultation with the chair and the DGS, form the committee.

The preliminary committee must have at least three members, including the chairperson, at least one of whom must have the *Economics Department's endorsement to chair Ph.D. dissertation committees*. As a general rule, the committee chair must have the endorsement; exceptions can be made on a case-by-case basis and require approval of the DGS. If the research project belongs to a Business field, the committee must include an outside member representing that field. In other cases where a cross-disciplinary project may benefit from the inclusion in the committee of a faculty member from another school or department, this will require the approval of the DGS in consultation with the committee chair.

The preliminary committee should normally serve as a basis for the formation of a full dissertation committee by the time the student prepares their Thesis Proposal. The dissertation committee must have at least four members, including its chair; and at least half of the dissertation committee including its chair must have the *Department's endorsement* (see part II. H. *Thesis Research* of the Study Guide for more details).

By the last week of the fall semester of the student's third year, the preliminary committee must be officially formed: the student must submit an <u>e-Doc to assign their Advisory Committee</u>. The student will attach an abstract and research plan for the paper to the e-Doc. The committee members confirm their agreement to serve on the committee by approving the e-Doc, which will also route for approval by the DGS.

- 3. *Intermediate progress*. Students should interact with their committees throughout their work on the paper. They are also encouraged to present their preliminary findings in the workshop courses (see part II. E. *Departmental Workshops* of the Study Guide). A preliminary draft of the paper should essentially be ready in April and presented at the annual departmental annual conference. At least two weeks before the conference, the student must submit the draft to their committee for comments and approval. The paper, along with the conference presentation, will constitute an intermediate progress report.
- 4. Completion and final grade. Following the intermediate progress report and taking the committee's comments into account, the student will complete the paper for final submission to the committee at least two weeks before the end of the first summer session. The committee will assign the grade due by the end of the first summer session, using the following scale: "high pass;"

"pass;" or "fail." Papers receiving "high pass" will be automatically entered in the Best Third Year Paper competition for financial awards. Preferences in the competition will be given to solo-authored papers.

5. Consequences of a failing grade. A failing grade will indicate the student's failure to make satisfactory progress towards the degree (see part II. I. Satisfactory Progress and Continuing Enrollment of the Study Guide for definitions). However, the student will have an option to do remedial work during the summer and part of the following fall semester in close consultation with the committee. The final make-up grade will be due at the end of the first eight weeks of classes in the fall. The student must present the final version of the paper to the committee at least two weeks ahead of that deadline. The grading options at this stage will be "pass/fail". A failing grade will be judged as a major failure to make satisfactory progress towards the degree. This will result in the department removing its commitment of financial aid, as of the following spring semester, to the student, if any was made at the time of admission. The student will still be considered for financial aid, on a semester-by-semester basis, but will have to compete based on academic merit with other needy students in the program for any available funds.

A student receiving a failing grade on the third-year paper will have options, in consultation with their committee and the DGS, to either continue to pursue the same or amended topic in the same field of study, or to choose a different field and reconstitute the committee altogether. In any event, students who do not pass the Third Year Paper requirement by the end of their 4th academic year in the Ph.D. program will be disqualified from continuation in the program.

APPENDIX A2 PROCEDURE FOR TOOL SKILL EVALUATION OF MATH COURSES

For a math class from a previous institution that you wish to use for the tool skill requirement, it must first be evaluated by the Director of Undergraduate Studies in the Math Department. They will send their evaluation of the coursework to the student, copying econgrad@iu.edu.

The process for having previous math coursework evaluated by the Math Department for the tool skill requirement is as follows:

- Please take all of the course materials that are to be considered (such as textbook, syllabi) and a photocopy of your transcript to the front desk in the Math Department, Rawles Hall 115 for the attention of the Director of Undergraduate Studies. Mark the courses to be considered on the transcript. The Math Department requests the course materials should include a syllabus, the title of the textbook used, all topics and chapters covered, and course pre-requisite if there is one. Class notes and a sample exam are preferred, but not required.
- Indicate the materials are for the Director of *Undergraduate* Studies and that you are a Ph.D. student in Economics. Ask the Math Department to copy econgrad@iu.edu stating the name of each course considered from the previous university and what each of these courses is equivalent to in the Math Department at IU.
- Our Graduate Study Guide says tool skill courses must be B or better; 9 credit hours (3 courses) are required for the PhD.

If the evaluation finds the course(s) eligible for use, the student will then request approval to use the course(s) toward tool skill fulfillment from the DGS.

Note: you are not asking the Math Department for a transfer of credit for these courses. You are requesting that they evaluate what your previous math coursework is equivalent to in the Math Department at Indiana University.

APPENDIX B

UNIVERSITY POLICIES: DISCRIMINATION, HARASSMENT, and SEXUAL MISCONDUCT

Please refer to the University Policy webpage linked above for full policy details.

SCOPE

- I. This policy applies to all members of the Indiana University community, including:
 - A. All students
 - B. All academic appointees, staff and temporary (hourly) employees
 - C. All others while on Indiana University property, including employees of third-party vendors and contractors, volunteers, and visitors, and others while involved in an off-campus Indiana University program or activity.
- II. Other university policies and codes related to misconduct remain in effect for complaints of misconduct other than discrimination, harassment and/or sexual misconduct. However, any report or complaint of misconduct that includes elements of the <u>covered behaviors</u> below may be addressed in accordance with this policy and its related complaint resolution procedures.

POLICY STATEMENT

- I. OVERARCHING POLICY TENETS
 - A. Indiana University prohibits discrimination and harassment on the basis of age, color, disability, ethnicity, sex, gender identity, gender expression, genetic information, marital status, national origin, race, religion, sexual orientation, or veteran status ("protected classes") in matters of admission, employment, housing, services, and in its educational programs and activities.
 - B. This policy governs the university's response to all forms of <u>discrimination</u> and <u>harassment</u>, and <u>sexual misconduct</u>. Such behaviors are unacceptable under Indiana University policy. (See <u>UA-01</u>, <u>Indiana University Non-Discrimination Policy</u>.) The university does not tolerate conduct in violation of this policy and will take action to prevent and address such misconduct.
 - C. It is the policy of the university to comply with all applicable federal and state laws regarding unlawful discrimination and harassment against protected classes. Procedures for reporting incidents of discrimination, harassment and/or sexual misconduct, and for investigating and adjudicating formal complaints, are part of this policy and are included below. These complaint resolution processes may vary depending on applicable law and policies relevant to the specific misconduct. In appropriate cases, and upon consultation with the Vice President and General Counsel, the university reserves the right to take prompt action in accordance with other university procedures. Questions about this policy, as well as the applicable complaint and complaint resolution processes, may be directed to the appropriate contacts set forth in this policy. (See Additional Contacts.)
 - D. Individuals who believe they have experienced discrimination, harassment and/or sexual misconduct in violation of this policy, and all members of the university community who may be aware of such incidents, are encouraged to promptly report

- incidents of discrimination, harassment, and/or sexual misconduct to the appropriate designated officials. (See Additional Contacts.)
- E. Some employees may have reporting obligations based on their role and responsibilities under this and other policies (See Employee Reporting Obligations.)
- F. Retaliation against anyone who makes a report of discrimination, harassment and/or sexual misconduct, or who participates in an investigation under any of the complaint resolution procedures set forth herein, is prohibited. (See <u>Retaliation</u>.)
- G. For every report, the university will review the circumstances of the reported conduct to determine whether the university has jurisdiction over the parties involved, and to take steps within its control to eliminate, prevent, and address the reported conduct. The university will respond promptly to all reports and assess all information available; the potential Complainant(s) will be offered information regarding resources and supportive measures, as well as options regarding reporting and applicable complaint resolution procedures. Where a formal complaint is filed or initiated, the university will provide a fair and impartial investigation and resolution, provide supportive and interim measures and, in the event a policy violation is found, impose appropriate sanctions and provide remedial measures. The appropriateness and severity of the sanctions imposed, up to and including termination or expulsion of the offender, will depend on the circumstances of the particular case. If the Respondent is not a member of the university community or is no longer affiliated with the university at the time of the report or at the time a formal complaint is initiated (including when the Respondent has graduated or left the university), the university typically is unable to take disciplinary action or conduct an investigation through the complaint resolution procedures herein.

APPENDIX C PREPARATION FOR THE PH.D.

By Robert A. Becker, Roy J. Gardner, and Nicolas Spulber

The Course Work for the Ph.D.

The proper time to think about the Ph.D. dissertation is immediately after the passing of the core exam. The preparation of a dissertation involves indeed not only the choice of a dissertation topic, but also a methodic course work program for properly handling that topic. The avoidance of taking a hodge-podge of graduate courses just for the fun of it, or just because these courses are given at "convenient" hours, distinguishes the serious student from the unprepared improviser.

The Choice of an Appropriate Topic

A workable Ph.D. topic involves choices of:

- (a) an economic problem amenable to theoretical treatment;
- (b) a hypothesis as to its possible solution(s);
- (c) an appropriate <u>way of empirically testing</u> your hypothesis and your theoretical approaches to its solution.

Note:

Not every economics topic, nor every title in economics represents a thesis topic. You must select a problem about which you would be able to <u>take a stand</u> as to its solution; i.e., about which you could develop a <u>thesis</u> as to its possible outcome.

Not all theories are appropriate: don't drag in theory to show economic literacy; what you need is a theory with which you can examine meaningfully the hypothesis you advance concerning a possible answer to your problem.

Be sure that you have a valid, serious, well-thought-through reason for choosing your topic.

Start thinking about a thesis topic <u>early</u> in your graduate studies and build as much knowledge as possible around it.

The Preparation of a Research Design

- 1. Discuss carefully your topic with <u>a faculty advisor</u>. Be sure that your choice is recognized by him/her/them as valid and significant.
- 2. When you have accumulated the necessary credits, prepare in agreement with your advisor a <u>Research Design</u> (or Project Description) specifying:
 - (a) the title of your proposed thesis;
 - (b) your purpose and hypothesis;
 - (c) the possible outline of the dissertation by chapters;
 - (d) your methodological problems;
 - (e) your eventual sources.

The Choice of the Ph.D. Committee

- 1. Be sure that the professor you ask to chair your committee is <u>interested</u> in your topic, works in that field, <u>and has known you as his student</u>.
- 2. In choosing the committee be sure:
 - (a) that the committee members can help you in respect to some specific aspect of the dissertation;
 - (b) that they will be able to help (with recommendations and suggestions) after your graduation;
 - (c) that they can work harmoniously with you and with the chair of your committee.

The Timetable for the Thesis

- 1. Present to and discuss with all members of your Ph.D. committee, your Research Design.
- 2. After the discussions, and with approval of the chair of your committee, present your proposal to a department workshop.
- 3. Prepare, in accordance with your chair, a <u>timetable</u> for the thesis work, chapter by chapter.

<u>Note</u>. A dissertation <u>is not</u> an expanded term paper. It is a work of a completely different caliber and scope: remember that a thesis must make some kind of contribution to your discipline--be it in the form of an <u>advance</u> in theory or in the form of a new and intelligent application of a theory already formulated.

Time Requirements for the Dissertation

- 1. Experience shows that the final preparation of a Ph.D. dissertation involves at a minimum, over a year of constant and serious work.
- 2. It is the responsibility of the student, NOT the faculty, to make sufficient progress towards completion of the dissertation. Students are strongly encouraged to stay in close contact with their advisor at all stages of the dissertation stage.
- 3. The end product (usually around say, 120 pages of text <u>plus</u> a tabular appendix of varying size) should be checked and rechecked for both <u>content</u> and <u>style</u> by your committee as well as by a <u>professional editor</u>.

<u>Note</u>. There's no turnpike route to the end of a thesis. Remember that a thesis is supposed to be the crowning work of your schooling years. It is supposed to prove that you deserve to be henceforth treated as an equal among the members of your profession.