UNIVERSITY FACULTY SENATE FORMS

Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: Saul Hoffman phone number x1907	
Department: <u>Economics</u> email address <u>hoffmans@lerner.udel.edu</u>	
Date:Dec. 1, 2009	
Action: Revision of Graduate Program Requirements and Policy Statement (Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, acade change, request for permanent status, policy change, etc.)	emic unit name
Effective term 10f (use format 04F, 05W)	
Current degree PhD (Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)	
Proposed change leads to the degree of: PhD (Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)	
Proposed name: NA Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)	
Revising:	
Undergraduate major / Concentration:(Example: Applied Music – Instrumental degree BMAS)	
(Example: Applied Music – Instrumental degree BMAS)	
Undergraduate minor:	
(Example: African Studies, Business Administration, English, Leadership, etc.)	
Graduate Program Policy statement change:	
(Must attach your Graduate Program Policy Statement)	
Graduate Program of Study: PhD Economics	
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)	
Graduate minor / concentration:	
Note: all graduate studies proposals must include an electronic copy of the Craduate Program Pol	liov Dooume

Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.

Please see Appendix II.

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

New Courses (all submitted for approval):

ECON804 Applied Econometrics II (new course number only)

ECON813 Microeconomic Theory II

ECON814 Macroeconomic Theory II

ECON845 Development Economics

ECON850 Dissertation Workshop

ECON853 Topics in International Macroeconomics

ECON862 Topics in Industrial Organization and Regulation (new name and content)

ECON813, 814, and 850 are required courses in the revised curriculum. Econ804, 845, 853, and 862 are electives. These courses will enable us to offer enhanced content in economic theory and in applied economics.

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education: http://www.ugs.udel.edu/gened/

Identify other units affected by the proposed changes:

(Attach permission from the affected units. If no other unit is affected, enter "None")

None of the proposed changes for the PhD program affect any other units.

Describe the rationale for the proposed program change(s):

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

Our PhD program curriculum has not been revised since its inception in 1995. In light of broader changes in the economics field and the UD Path to Prominence initiative, we are revising our program to strengthen coursework in economic theory, econometrics and applied courses, as well as adding a dissertation workshop. This will be accomplished by the addition of two new theory courses, a new econometrics sequence, and advanced field courses. All core PhD courses will now be separated from parallel courses for our MA students and for students in other programs. The curriculum changes that we propose will not only strengthen the PhD program, but allow us to serve these other programs and constituencies better.

Program Requirements:

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.)

Overview: We are creating greater course separation among our graduate programs. The net impact of the changes is to substitute two more advanced theory courses, more advanced econometrics courses, and two more advanced applied field courses for the courses currently required. See the side-by-side comparison below. Please also see Appendix 1 for additional information.

Current	Proposed
MA in Economics or equivalent. Required courses for MA:	MS in Economics and Applied Econometrics or equivalent. Required courses for MS:
ECON801, ECON802, ECON810, ECON822, and ECON868; additional coursework totaling 30 credits	ECON810, ECON811, ECON812, ECON822, and ECON823; one of ECON804, ECON824 or ECON825; additional coursework totaling 30 credits.
ECON811 - Advanced Microeconomic Theory (3) ECON812 - Advanced Macroeconomic Analysis (3) ECON824 - Topics in Advanced Econometrics (3) ECON825 - Time-Series Econometrics (3) 3 field courses (9) Dissertation (9)	ECON813 - Microeconomic Theory II (3) ECON814 - Macroeconomic Theory II (3) ECON824 - Econometrics of Cross-Section and Panel Data and/or ECON825 - Time-Series Econometrics (3-6)* ECON850 - Dissertation Workshop (2) Advanced Topics Field Courses (at least 6) Approved Elective (0-3) Dissertation (9) * ECON824 or 825 may have been taken as part of MS degree

Credits shown in parentheses

Appendix 1. Detailed Description of the Proposed Changes to the PhD in Economics

- 1. Economic Theory: Create separate MA and PhD tracks in Microeconomic and Macroeconomic Theory. The current ECON801 (Microeconomics) and 802 (Macroeconomics) will be required for MA students in Economics and available to students in other units (FINC, FREC, etc). PhD students will take four theory classes, beginning with the current ECON811 (Microeconomic Theory I) and a revised ECON812 (Macroeconomic Theory I). They would be followed by new courses, ECON813 (Microeconomic Theory II) and ECON814 (Macroeconomic Theory II). The content of ECON811 and ECON813 would largely come from the current ECON811 and ECON819. ECON814 would have most of the content of our current ECON812.
- **2. Econometrics:** Create separate MA and PhD tracks. The current ECON822 (Econometrics) will be renumbered as ECON803. It will be offered to MA students in Economics and MS students in Finance as a more applied alternative to ECON822. ECON828 will be renumbered as ECON804 and be available as an elective to graduate students in Economics and Finance. We will include more statistical theory and hypothesis testing in ECON822 and make ECON823 (Econometric Theory II) a required econometric theory course for PhD and MS students. The current PhD-level econometrics courses (ECON824 and ECON825) will be adjusted, commensurate with the changes in the pre-requisite courses.
- **3. Field/Elective Courses:** Students will be required to have at least two fields consisting of at least two required courses. In addition, we will create selected advanced field courses called Topics courses that require ECON823 and either ECON811 or ECON812. Some Topics courses may also have additional prerequisites or corequisites, such as ECON813 or ECON814 and/or either ECON824 or ECON825. All PhD students would be required to take a minimum of two such courses and pass a field exam in one field offering a Topics course. The department will initially offer the following Topics courses: Industrial Organization and Regulation, Development Economics, and International Macroeconomics on a rotating basis. Additional Topics courses may be offered on a rotating basis depending on faculty and student interest. Examples of possible Topics courses are the following: Environmental Economics, Labor Economics, Health Economics, Economic History, Macroeconomic Theory, and Public Finance.

The remaining courses may come from graduate field courses in Economics or electives in other departments. Students are normally limited to two courses from other departments. Courses taken outside the Economics Department must have the prior approval of the Graduate Committee. Note: There is no change in the additional requirements for the Concentrations in Finance and Agricultural Economics. Students interested in the Concentration in Finance take the following three courses as a part of their PhD program: FINC870, FINC871, and FINC872. Students interested in the Concentration in Agricultural Economics must take two of the following three courses: FREC801, FRECH827, and FRECH834. Students must also pass a comprehensive examination and complete a dissertation in the area of the concentration.

4. PhD Proposal Development: Create a year-long two-credit Thesis Workshop course for third-year PhD students (ECON850). During this course students will explore research ideas with the goal of producing a dissertation proposal.

5. Summary of the changes to the PhD program

	Current PhD Program	Proposed PhD Program	Nature of Change
Courses	(Including coursework	(Including coursework	
	for required MA)	for required MS)	
Mathematics	ECON810	ECON810	No change
Microeconomic Theory	ECON 801/811	ECON811/813	Change of Content
Macroeconomic Theory	ECON802/812	ECON812/814	Change of content
	ECON822/ECON823*/		ECON823
Econometrics	ECON824/ECON825	ECON822/ECON823/	changed from
Econometrics	*not required but taken	ECON824/ECON825	optional to
	by all past PhDs		required
Field/Elective Courses	3-Course field with additional work for	2 Topics courses (advanced) Thesis Workshop	Addition of two Topics courses

	PhDs 5 elective/field courses	(ECON850) 5 electives	and a workshop for PhD students
Additional Requirements	One 3-course field and field exam	Two 2-course fields One of the fields must include a field exam and a Topics course	Change in number of fields and addition of Topics Course requirement

Appendix II. Program Policy Statement (Revised) - PhD in Economics

The revised program policy statement incorporates the proposed curriculum changes. It also codifies minor procedures that have been adopted since the original program policy statement. No further changes have been made. The new program policy statement follows.

DEPARTMENT OF ECONOMICS UNIVERSITY OF DELAWARE GRADUATE PROGRAM POLICY STATEMENT - PH.D DEGREE IN ECONOMICS

Degree Requirements:

Students in the PhD program in Economics complete coursework in Economics as outlined below. In addition, all students must complete either a MS in Economics and Applied Econometrics at the University of Delaware or satisfy an equivalency requirement.

The following is a summary of the course and credit requirements for the MS in Economics and Applied Econometrics.

Mathematics: ECON810	3	
Economic Theory: ECON811 and ECON812		6
Econometrics: ECON822, ECON823, and at least one of the following:		
ECON804, ECON824 or ECON825		9
Electives: Graduate-level courses approved by the Graduate Committee		<u>12</u>
TOTAL REQUIRED CREDITS		30

Required courses in the PhD program (in addition to those listed above for the MS degree) are:

Economic Theory: ECON813 and ECON814		6
Econometrics: ECON824 and ECON825 (if not taken as part of MS degree)	3-6	5
Dissertation Workshop: ECON850 (two consecutive semesters of 1 credit)	2	
Topics Field Courses (at least two)		6
Elective: To be chosen from graduate-level courses with approval of the		
Graduate Committee		0-3
Dissertation (ECON969)	<u>9</u>	
TOTAL REQUIRED CREDITS (in addition to MS or MS equivalence)		29

Students must pass preliminary examinations in both Microeconomic and Macroeconomic theory. Students are required to take these exams when first offered after completion of ECON813 (Microeconomics) and ECON814 (Macroeconomics). The Microeconomics exam is generally offered at the end of June, while the Macroeconomics exam is generally offered at the beginning of February of each year. Students who do not pass an examination on the first attempt may retake it one additional time. Continuation in the program is contingent on passing these examinations.

Students must also pass a comprehensive field exam in a two-course field that includes a Topics course. Field examinations are offered in July and in February. Students must notify the Graduate Programs Coordinator at least one month in advance of an exam of their intent to take the exam.

The number of fields and Topics courses available depends on staffing considerations. Students must take at least two courses in the field prior to taking the examination. The Department maintains a current list of fields, Topics courses, and courses that satisfy the field requirements. A faculty committee consisting of at least two members will be responsible for the

writing and grading of the examinations. Each examination is graded as Pass or Fail. Students must receive a grade of Pass. All students must also complete at least one additional two-course field selected from the full list of fields and concentrations. There is no field exam requirement for these additional fields.

All students must register for and attend ECON890 (weekly department seminar) and meet established participation requirements.

Additional Requirements for Concentrations in the Allied Fields of Agricultural Economics and Financial Economics:

While earning a Ph.D. in Economics, students may choose to complete concentrations in either Financial Economics or Agricultural Economics. The transcript and diploma of each student completing one of these concentrations will note the concentration by name. The additional requirements for the concentrations are described further below.

The Concentration in Agricultural Economics:

The student must take at least two approved Agricultural Economics courses (two of the following: FREC801, FRECH827, and FRECH834) and must pass an examination in Agricultural Economics. In addition, students must write a dissertation in Agricultural Economics under the joint supervision of one member of the faculty whose primary appointment is in the Department of Food and Resource Economics and one whose primary appointment is in the Department of Economics. The dissertation committee may have additional members whose primary appointment is in the Department of Food and Resource Economics but must have one additional member whose primary appointment is in the Department of Economics. The total number of committee members must be at least four but no more than six.

The Concentration in Financial Economics:

The student must take at least two approved courses in Financial Economics (FINC871 and FINC872) and must pass an examination in Financial Economics. In addition, students concentrating in Financial Economics must write a dissertation in financial economics under the joint supervision of one member of the faculty whose primary appointment is in the Department of Economics and one member whose primary appointment is in the Department of Finance. The dissertation committee may have additional members whose primary appointment is in the Department of Finance but must have one additional member whose primary appointment is in the Department of Economics. The total number of committee members must be at least four but no more than six.

M.S. Equivalency: Students who receive a Master's degree in Economics elsewhere do not generally need to complete the full 59 credits for the PhD in Economics at UD. While graduate credit used to earn a degree cannot be used to earn another degree, students my receive equivalency credit that reduces the total number of additional credits needed for the PhD degree. Courses granted equivalency substitute for required course credits for our MS in Economics and Applied Econometrics.

The Graduate Committee determines equivalency on an individual basis. Equivalency is granted only when a student provides evidence that a course is fully equivalent to one required for the MS in Economics and Applied Econometrics and that mastery of the material has been achieved. The Graduate Committee has sole authority to award equivalency.

Admissions Policies: Applicants will be admitted to the program based upon enrollment availability and their abilities relative to other candidates. The following are the minimum requirements.

- Baccalaureate degree from an accredited college or university.
- An officially reported GRE score. Students are normally expected to have a minimum score of 1100 on math and verbal sections combined.
- An undergraduate GPA of 3.0 or higher.
- For non-native English speakers an officially reported minimum TOEFL score of 600 (paper-based test) or 250 (computer-based test) or 100 (iBT).
- A written statement of goals and objectives, including a statement that clearly identifies the applicant's interest in the program.
- Coursework in microeconomics and macroeconomics at the intermediate level or above and in statistics and mathematics (multivariate calculus) is expected. Otherwise qualified students who lack this background may be directed to appropriate coursework to remedy this deficiency.

Admission to the graduate program is competitive. Those who meet stated requirements are not guaranteed admission. Admission decisions are made by the Department of Economics Graduate Committee and are based upon a number of factors, including the applicant's GRE scores, college transcripts, application essays and letters of recommendation.

Program Administration: The PhD program is administered by the department's Graduate Committee under the direction of the Director of Graduate Programs. The committee consists of members of the departmental faculty appointed for one-year, renewable terms by the departmental Chairperson. This committee is charged with recruiting students to the program, making admissions and funding decisions, and assuring that the program is administered in accordance with this policy document.

Graduate Program Faculty: The graduate program faculty includes all full-time, Department of Economics faculty of the rank of assistant professor or above. Part-time faculty and faculty with joint appointments may be included at the discretion of the Chairperson, Department of Economics.

Requirements for Graduation: Students must meet the University's full-time residency requirement of at least one continuous academic year consisting of at least nine credits per semester and must complete their degree within the time limit established by the University. The University of Delaware Graduate catalog provides guidelines governing a possible extension of the time limit for circumstances beyond a student's control.

Degree Completion:

Admission to Ph.D. Candidacy:

Procedures for admission to Ph.D. candidacy are as specified by the Office of Graduate Studies in the graduate catalog. Admission to candidacy must be obtained before the deadlines specified in the graduate catalog calendar. Responsibility for seeing that admission is secured at the proper time rests with the student, but must include the recommendation of the student's dissertation committee and the chairperson of the department.

Doctoral Dissertation:

- A. Dissertation Proposal
 - 1. It is the responsibility of the student to form a Ph.D. dissertation committee. The composition of the dissertation committee must be approved by the Graduate Committee and be in accordance with the provisions listed in the University of Delaware Graduate catalog.
 - 2. Faculty with joint appointments in the Department of Economics can serve as outside members of dissertation committees.
 - 3. Upon obtaining the written consent of the Department Chairperson, the student must notify the University Administrator of Graduate Student Academic Affairs in writing of the composition of the committee.
 - 4. Overlap in membership between the Department's Graduate Committee and the dissertation committee does not require those involved to disqualify themselves for respective action.
 - 5. Students who have completed all required course work but who have not been admitted to candidacy can register for Research (ECON 868). However, no more than three credits of Research accomplished prior to admission to candidacy can be applied toward the dissertation.
 - 6. The student must make an oral defense of approximately one hour of a written dissertation proposal before the student's dissertation committee. The length and content of the written proposal is determined by the Chairperson of the dissertation committee. To be approved, the proposal must receive the unanimous support of the committee members. The Graduate Committee reviews all cases of students who do not pass the oral defense to determine whether or not the student is making sufficient progress to justify continuation in the doctoral program.
 - 7. Upon approval of the dissertation proposal by the committee, the student shall provide one copy of the proposal for his or her file in the department office. The proposal is to be signed by all members of the committee. The chairperson of the dissertation committee will also notify the University Administrator of Graduate Student Academic Affairs, who admits the student to formal candidacy. (Consult graduate catalog for specific time schedule for admission to formal candidacy).

B. The Dissertation

- 1. Changes in the membership of the dissertation committee require the approval of the Graduate Committee.
- 2. The bibliographic form and style of the dissertation must conform to expectations of the Office of Graduate Studies.
- 3. Copies of the Dissertation:
 - a. one for the departmental archives;
 - b. others as required by the Office of Graduate Studies; students should consult with the Office of Graduate Studies regarding dissertation guidelines.

C. Oral Defense of Dissertation

- 1. All other requirements for the degree must be completed before the oral defense of dissertation is scheduled.
- 2. The chairperson of the dissertation committee shall be responsible for scheduling the defense and for notifying the faculty and the University Administrator of Graduate Student Academic Affairs three (3) weeks prior to the defense.
- 3. The dissertation defense is administered by the dissertation committee.
- 4. The oral defense is open to the public, but the right to vote is reserved to the dissertation committee.
- 5. Grading is on a pass or fail basis. A majority vote is required for any action. The Graduate Committee reviews all cases of students who do not pass the oral defense to determine whether or not the student is making sufficient progress to justify continuation in the doctoral program.
- 6. It is the responsibility of the chairperson of the dissertation committee to notify the Director of Graduate Studies and the University Administrator of Graduate Student Academic Affairs of the decision of the dissertation committee.

Graduate Student Funding and Time Limits: Graduate student financial support comes from both University and non-university sources. Faculty graduate advisors are not obliged to provide financial support to students, nor does the Department of Economics guarantee financial support for the duration of a student's program.

Financial aid is awarded on the basis of merit within the defined programs of study by the Department Chairperson. Graduate students under contract are reviewed each semester for academic standing and progress toward the degree. Subject to limits imposed by available funds, the Department attempts to continue to support those PhD students progressing satisfactorily through completion of the normal degree period of three semesters for the Master of Science in Economics and Applied Econometrics degree and two and a half additional years for completion of the PhD degree. Except for valid extenuating circumstances, financial support will not continue beyond this period.

Dismissal Policy: The Department of Economics adheres to the University policy for termination of doctoral students with the following specific exceptions. Students must terminate their studies for the doctorate if they are unable to pass either of the preliminary examinations (Microeconomics and Macroeconomics) or the field exam after two attempts or if they fail to make sufficient progress as determined on an individual basis by the Graduate Committee. If in the opinion of the Graduate Committee the student is not making satisfactory progress, the student and the student's advisor will be notified. The student will have the opportunity to meet with the Director of Graduate Programs to discuss to Committee's actions. Possible outcomes of this action include reassignment of the student to another faculty advisor or termination of the student from the graduate program.

Waiver Policy: Students who seek a waiver of any of the above-mentioned policies must do so in writing to the Graduate Committee.

ROUTING AND AUTHORIZATION:	(Please do not remove supporting documentation.)
Department Chairperson	Date

UNIVERSITY FACULTY SENATE FORMS

Dean of College		Date	
Chairperson, College Curriculum Comm	nittee	Date	
Chairperson, Senate Com. on UG or GR	Studies	Date	
Chairperson, Senate Coordinating Com.		Date	
Secretary, Faculty Senate		Date	
Date of Senate Resolution		Date to be Effective	
Registrar	Program Code	Date	
Vice Provost for Academic Affairs & In	ternational Programs	Date	
Provost		Date	
Board of Trustee Notification _		Date	
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