

Revised 9-17-09

Economics
Undergraduate Program

1. Learning Outcomes: Approved by Faculty November 2008

Graduates of the undergraduate program will be able to:

1. use the micro model of market demand and supply to predict changes in price and output that result from exogenous changes;
2. use macroeconomic models to explain the changes in output, employment, inflation, and growth;
3. describe the function of key economic institutions, and
4. find, organize, and interpret economic information.

2. Assessment Plan: Approved by Faculty November 2008, with draft amendments May 2009*

Measures	Target	Learning Outcome	Cycle and Reviewers
Test of Understanding of College Economics	The average score exceeds the average score among Economics majors in the norming sample on both Macro and Micro exams.*	1-2	Each Fall term, the Undergraduate Studies Committee will coordinate with Capstone instructors to administer the Test of Understanding of College Economics to students enrolled in Capstone courses (ECON-480, -491 and -492). Appendix A of this Report shows how the content areas of TUCE relate to Learning Outcomes 1-2. The Committee will include a summary of scores in the annual Undergraduate Assessment Report presented to the Chair and the Council each March.
Capstone Instructors' Reports	Capstone Instructors find that 90% (nearly all) of capstone projects demonstrate student competency in learning outcomes.*	1-4	Each January, the Undergraduate Studies Committee will convene a meeting Capstone Instructors to obtain their reports on the strengths and weakness of seniors based upon completed written assignments with respect to the learning outcomes. The Committee will include notes from the meeting in the annual Undergraduate Assessment Report presented to the Chair and the Council each March.
Focus Group of Seniors	90% (nearly all) of students express	1-4	Prior to March 1 each year, the Undergraduate Studies Committee will convene a focus group of graduating seniors. The Committee will

	confidence in their ability to meet departmental goals.*		summarize the proceeding of the focus group in the Undergraduate Assessment Report presented to the Chair and the Council each March.
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* May 2009 draft of targets; adoption will require endorsement of Undergraduate Studies Committee and vote of Council in Fall 2009.

3. History of Program Changes Made Based on Assessment

What assessment activity did you conduct?	What did you learn about your program as a result? Please be specific about the learning outcomes and targets.	How are you using your findings to improve your program? Please provide examples of changes you have made or are making.
2000-2001 BA Adviser Report to the Council and Chair	Undergraduate advisers reported to the Chair and the Council that degree requirements were so complex that advising was difficult. They felt it was dampening demand for the major. Relevant to outcomes 1-4, but especially 4.	In 2002, we reorganized our undergraduate program. We streamlined degree requirements and replaced the “BA in Economic Theory” with our current “BS in Economics”
2005 Survey of Recent Graduates	Student response indicated that the department’s system of advising undergraduates was weak. Relevant to outcomes 1-4	In Fall 2006, we appointed a BA Program Adviser (aka Director of Undergraduate Studies). Over subsequent years, the BA Program Adviser implemented recruitment activities; coordinated advising between faculty, CAS and schools where we have many double majors; organized undergraduate extracurricular activities such as the honor society; and began to actively encourage undergraduate student research. Since 2006, the department has had rapid growth in the number of majors. Economics students now regularly participate in research conferences on and off campus.
2006 Report of Instructors to Council and Chair	Instructors of development courses noted (1) excess demand for the survey course, and (2) that offering undergraduates two courses would better serve the learning objectives of the courses. Relevant to outcomes 2-4	In AY 2007-2008, we began offering three undergraduate courses on development economics: a survey course for non-majors, a macroeconomics of development course, and a microeconomics of development course.
2006-2007 Report of BA Adviser and extracurricular	Discussion between the Chair, the faculty adviser for the Fed Challenge “club”, and the BA Adviser. The	In Fall 2008, we began to offer two different options for ECON-480, our research option for meeting the capstone requirement. We offered the traditional option in which a student completes an original research paper.

sponsors to the Council and Chair	discussion identified how our extracurricular activities intersected with student learning objectives and led us to believe the objectives could be better met by formalized the Fed Challenge as a course. Relevant to outcomes 2, 4	The second option was to allow students particularly interested in macroeconomic policy to integrate their knowledge by participating in the Fed Challenge.
Spring 2009 compilation of direct and indirect measures as detailed in Assessment Plan and reported by Undergraduate Studies Committee	As this was the first year of implementation of the full assessment plan, the department had not set specific targets. However, assessment data revealed that several students felt that the program could better communicate the need for advanced mathematics as a prerequisite for graduate study in economics.	The Council tasked the Undergraduate Studies committee with the following action item for improving student learning: Support learning outcomes 1 and 2 by developing a joint math/economics program to meet the needs of students considering graduate study in economics.

4. History of Changes Made in Assessment Process

AY 2006-2007

- The BA Program Adviser consulted with Lynn Stallings of the Assessment Team. They discussed the strengths and weaknesses of the 2002 draft of Student Learning Objectives. The main strength of the learning objectives was that they were directly tied to the department and college mission statements. The main weaknesses were that the many objectives were listed as a single objective and that the objectives were not concrete enough. For these reasons the objectives would be hard to assess by any measure.
- The BA Program Adviser worked with, a committee appointed by the Chair to revise the learning outcomes, which were proposed in November 2006 and accepted by the department Council. In February 2007 the committee held an open meeting on assessment to discuss measures. As a result of the meeting, the committee recommended that the department consider administering the Test of Understanding of College Economics to seniors in Capstone courses. The committee also recommended that the department devise course-specific questions for the Student Evaluation of Teaching Form, and that it conduct periodic surveys of alumni.

AY 2007-2008

- Following up on the recommendations from 2006-2007, the BA Program Adviser obtained examination materials for the Test of Understanding of College Economics.
- The informal discussions held between the Chair, the extracurricular coach, and the BA Adviser led us to consider adding a Capstone Instructor's meeting as a method of assessment for Undergraduate programs.

AY 2008-2009

- On October 8, 2008, the Chair and BA Program Adviser attended a CAS workshop on assessment; the workshop included some specific suggestions to make our assessment plan simpler and more useful to the department.
- During the month of October 2008, the department conducted an assessment audit. The results of the assessment audit are reported in the “History of Program Changes Made Based on Assessment.”
- On October 24, the BA Program Adviser met with Assessment Project Team members to discuss the strengths and weaknesses of the assessment plan for undergraduate programs developed by the department in 2006-2007.
- On November 12, the Chair, MA Program Adviser, and PhD Program Adviser met with department Faculty to formalize learning objectives for MA and PhD programs. The results of the assessment audit were used to identify methods of assessment for graduate programs.
- Revisions to the undergraduate assessment plan were approved by the Faculty via electronic vote on November 15, 2008.
- The full assessment plan was implemented during the Spring 2009 semester. The Undergraduate Studies Committees submitted its report to the Department Chair and Council (attached) and the Council held its Assessment Meeting on April 8, 2009. The Council endorsed the following action items for improving assessment, as recommended by the Committee: The Undergraduate Studies Committee will better define the learning outcome “finding data.” (That is, develop more specific goals including: What data do we want them to find? What sources should they know? What processes should they be familiar with? That is, the Committee will develop a rubric.) Additionally, the Committee and Council will consider targets for learning outcomes in Fall 2009.

Attachment: Undergraduate Studies Committee Report to Chair and Council, 2009

To: Chair and Council
From: Undergraduate Studies Committee
Date: December 15, 2008

Re: Assessment Data on Undergraduate Program

We are pleased to submit the report on assessment of the undergraduate program in economics for the department's assessment meeting in March 2009. The Capstone Instructors' Report, the Focus Group Report, and the TUCE Exam results appear below.

A brief summary of important issues:

While capstone instructors feel that students' knowledge is fragmented, the solid student performance on the TUCE exam is reassuring.

Both students and capstone instructors feel that elements of the research process (finding data and writing economics) could be introduced earlier.

Students want a math-econ option. (A note: Mary Hansen reports that students trying to prepare for application to graduate school have reported difficulty getting in courses. She has discussed these coordination problems with the Math department and they are happy to work on a joint program next AY.)

Recommended action item for Undergraduate Program: Develop a joint math-econ program.
Recommended action item for improving assessment: Define targets for the outcome "finding data."
(That is, develop specific goals for students. What data do we want them to find? What sources should they know? What processes should they be familiar with?)

Capstone Instructors' Report December 2008

The Capstone Instructors discussed the strengths and weaknesses of the students' work via e-mail meeting the first week of December 2008. The capstone instructors are pleased by the vigorous growth of the major and the high level of engagement of the students. The most frequently expressed concern is that some students have fragmented knowledge of the core concepts; consequently too few students understand how core concepts are used as tools to approach new problems. A second concern is that students have little experience in writing economics.

Focus Group Report December 2008

The Undergraduate Studies Committee convened a focus group of seniors on December 10, 2008. Eight students attended at least part of the meeting; additional students sent comments in writing. Four members of the Committee attended. Students were mainly pursuing the BS; BA students were under-represented. The Committee asked students to share their perceptions of overall strengths and weaknesses of the program. They also asked specifically whether students felt confident about their abilities with respect to each of the department's four student learning outcomes.

The students are satisfied with the quality of the program. They like our demanding courses and are enthusiastic about the explicit connections made in courses between theory and policy application. The students express concern about communications. They want better, earlier information on

- (1) how to plan a major, including sequencing of courses (especially the role of 322),
- (2) scheduling of future courses (we do not stick to the schedule posted online), and
- (3) the importance of mathematics to further serious study in economics.

Students suggest that it would be useful to

- (1) include a link to the department's Virtual Advisor on all syllabi, and
- (2) develop a math-econ program to make students more aware of the potential need to explore math earlier.

Students feel confident about their mastery of departmental goals (1) through (3). They did not feel confident about finding data. They express a desire for earlier exposure to the research process, including finding data.

TUCE Exam Results

The TUCE exam was administered to 16 capstone students on December 11, 2008. The results, summarized in the table below, show that our students compare favorably to similar groups of students in the norming sample.

Raw Score		Percentile Rank	
MICRO	MACRO	MICRO	MACRO
18		88	
10		35	
22		97	
19		91	
21		95	
14		67	
15		74	
	16		69
	23		95
	27		99
	18		78
	14		42
	23		95
	19		82
	15		63
	17		74
17.00	19.11		
12.98	14.64		
13.44	14.76		
14.10	15.05		
13.54	17.64		

Economics
MA Program

1. Learning Outcomes: Approved by Faculty November 2008

Graduates of the MA Program will be able to:

1. Solve economic models mathematically and provide intuitive explanations of the results, and
2. employ and interpret econometric models to answer a research question.

2. Assessment Plan: Approved by Faculty November 2008, with draft amendments May 2009*

Measures	Target	Learning Objectives	Cycle and Reviewers
Comp Exam Graders' Report	Exam graders find that 80% of completed exams demonstrate student competency in learning outcomes.*	1	Within one month after submission of grades for the MA comprehensive exams, the Graduate Studies Committee will convene a meeting of Comp Graders to obtain their reports on strengths and weakness of MA candidates based upon the written responses in the examinations. The Committee will include notes from the meeting in the MA Assessment Report presented to the Chair and the Council each March.
Econometrics Instructors' Report	Instructors find that 80% of completed course projects demonstrate student competency in learning outcomes.*	2	Each academic year, the Graduate Studies Committee will convene a meeting of instructors of ECON-523 and ECON-524 to obtain their reports on strengths and weakness of MA candidates based upon completed written assignments and examinations. The Committee will include notes from the meeting in the MA Assessment Report presented to the Chair and the Council each March.
Focus Group	90% (nearly all) of students express confidence in their ability to meet departmental goals.*	1-2	Prior to March 1 each year, the Graduate Studies Committee will convene a focus group of recent graduates. The Committee will summarize the proceeding of the focus group in the MA Assessment Report presented to the Chair and the Council each March.

* May 2009 draft of targets; adoption requires endorsement of Graduate Studies Committee and vote of Council in Fall 2009.

3. History of Program Changes Made Based on Assessment

What assessment	What did you learn about your program as a result?	How are you using your findings to improve your program?
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activity did you conduct?	Please be specific about the learning outcomes and targets.	Please provide examples of changes you have made or are making.
1999 MA Program Adviser Report to Council and Chair	The MA Program Adviser expressed concern to the Council that capstone comps, as actually written, were not truly comprehensive but were based on material that all students could expect to have addressed in their course work. Relevant to outcome 1.	In 2000 we eliminated “capstone” comp exams for tracks and implemented a single comp exam after the basic theory courses.
2004 MA Instructors Report to Council and Chair	MA Instructors found that demand for development courses among students in SIS was high. To promote inter-school cooperation, they worked with SIS to create a Economics Track within the SIS International Development degree. Relevant to outcome 1.	In 2005 we transformed the Development Finance and Banking Track into the Development Economics Track.
2005 MA Instructors Report to Council and Chair	MA Instructors felt that our MA graduates would need to know more econometrics and have hands-on experience using statistical software in their jobs or in further study. Relevant to outcome 2.	In 2007, we began offering a two-course sequence in econometrics in our MA Program (ECON- 523 and -524).
Spring 2009 compilation of direct and indirect measures as detailed in Assessment Plan and reported by Graduate Studies Committee	As this was the first year of implementation of the full assessment plan, the department had not set specific targets. However, Comp Graders indicated that exams revealed that a number of students have a difficult time explaining mathematical results intuitively and applying microeconomic models to less traditional problems. This may be related to prerequisite confusion or enforcement.	The Council tasked the Graduate Studies committee with the following action item for improving student learning to: Support learning outcome 1 by clarifying the pre-requisites for core theory courses (ECON-500 and ECON-501) and synchronize catalog and program descriptions.

4. History of Changes Made in Assessment Process

AY 2008-2009

- During the month of October 2008, the department conducted an assessment audit. The results of the assessment audit are reported in the “History of Program Changes Made Based on Assessment.”

- On November 12, the Chair, MA Program Adviser, and PhD Program Adviser met with department Faculty to formalize learning objectives for MA and PhD programs. The results of the assessment audit were used to identify methods of assessment for graduate programs.
- The graduate program assessment plans were approved by the Faculty via electronic vote on November 15, 2008. The full assessment plan was implemented during the Spring 2009 semester. The Graduate Studies Committees submitted its report to the Department Chair and Council (attached) and the Council held its Assessment Meeting on April 8, 2009. The Council endorsed the following action item for improving assessment, as recommended by the Committee: The Graduate Studies Committee will compare the department's MA Comprehensive Exam to those administered by other local MA programs (including, but not limited to, George Mason University, George Washington University, and Johns Hopkins SAIS program) to consider whether the comprehensive exam graders' report is giving us useful information on learning outcomes.

Attachment: Graduate Studies Committee Report to Council, 2009

To: Chair and Council
From: Graduate Studies Committee
Date: April 1, 2009
RE: Assessment Data on MA Program

We are pleased to submit the report on assessment of the Master's program in economics for the department's assessment meeting in April 2009. The Comprehensive Exam Graders' Report, the Econometrics Instructors' Report, and the Focus Group Report appear below.

A brief summary of important issues:

Comprehensive exam graders feel that while most students can solve microeconomic models mathematically, they have a more difficult time explaining these results intuitively and applying microeconomic models to less traditional problems. Students seem to have a clear understanding of the mathematical tools used in macroeconomics, and can successfully explain the results of these models intuitively. This may be related to confusion about prerequisites or inappropriate granting of prerequisite waivers.

Econometric instructors feel that those students who successfully complete the econometrics sequence (ECON-523 and ECON-524) with a grade of B or better (thus fulfilling their University research requirement) can employ and interpret the results from econometric models. Those students who earn lower than a B in these courses are unable to correctly interpret the results from econometric models.

Though generally satisfied with the program, students recommend that the Department reinstate *Introduction to Mathematical Economics* (ECON-505) as a non-concurrent prerequisite for Microeconomics (ECON-500). They recommend that the department develop a more standardized comprehensive exam, and more stringently enforce course prerequisites.

Recommended action item for Masters' Program: Clarify the pre-requisites for core theory courses (ECON-500 and ECON-501) to synchronize catalog and program descriptions.

Recommended action item for improving assessment: Compare the department's MA Comprehensive Exam to those administered by other local MA programs (including, but not limited to, George Mason University, George Washington University, and Johns Hopkins SAIS program) to consider whether the comprehensive exam graders' report is giving us useful information on learning outcomes.

Comprehensive Exam Graders' Report
March 2009

The Comprehensive Exam Graders discussed the strengths and weaknesses of the students' exams at an Assessment meeting held on March 25, 2009. Graders were pleased with the students' ability to solve mathematically and explain the results from macroeconomic models. Students also successfully demonstrated their ability to solve the types of constrained optimization problems used in Microeconomic theory.

Graders' expressed concern that MA students have a difficult time interpreting and solving microeconomic problems that fall outside of the basic constrained optimization model. Graders also expressed concern about the level of understanding of macroeconomic models among those students who were taught Macroeconomics (ECON-501) by an adjunct professor in the Fall semester of 2007.

Faculty members attending the Assessment meeting believe that the level of instruction in the core theory courses (ECON-500 and 501) is compromised by the ability of unqualified undergraduate and non-economics graduate students to enroll in the courses. Faculty discussed methods to clarify the prerequisites for these courses and ensure that the prerequisites are met.

Faculty expressed concern that students may not be learning enough economic intuition because of the mathematical rigor of the core theory courses, particularly Microeconomics. Various solutions were discussed including: reinstating *Introduction to Mathematical Economics* (ECON-505) as a required course in all MA tracks, developing a math qualifying exam and requiring students who fail the exam to pass ECON-505 prior to enrolling in ECON-500, and changing the objectives of the program or the core courses within the program to be less mathematical in nature. The last option could, for example, involve creating two sections of the core microeconomic theory course—only one of which would use calculus (ECON-500C).

Econometrics Instructors' Report

March 2009

The Econometrics instructor discussed the strengths and weaknesses of student performance in the Econometrics sequence (ECON-523 and 524) at an Assessment meeting held on March 25, 2009. In general, students earning a B or better can successfully employ econometric models and interpret the results (i.e. the coefficient estimates) of these models. With enough lab exposure, those students earning below a B can successfully estimate an econometric model. However, students earning below a B cannot interpret the results from econometric models. The instructor expressed concern that because students must earn a B or better in order to fulfill their research requirement using ECON-523 and 524, faculty may be pressured to inflate the grades of those students who fail to perform well in these courses.

Focus Group Report

March 2009

The Graduate Studies Committee convened a focus group of MA students on March 25, 2009. Five students were in attendance. Students in attendance are primarily completing the General Track; one participant is completing the Development Track. Two of the students are completing the BA/MA program. The committee asked students to share their perceptions of the overall strengths and weaknesses of the program. They also asked specifically whether students felt confident about their abilities with respect to each of the department's two student learning outcomes for the program.

The students are generally satisfied with the program. They cited the breadth of knowledge of the full-time faculty, and the courses' focus on empirical applications and policy implications. They appreciate that most of the courses are offered in the evening, and that students have excellent access to professors and academic advisors.

Students expressed concern about the quality of adjunct professors in the program, and felt that the B requirement for the Econometrics sequence (ECON-523 and 524) was too stringent. Some students felt that some courses are being taught at too low a level, in part due to the prevalence of students who are not qualified to enroll in the course.

Students offered three suggestions to improve the program:

- (1) Students should be warned of the math intensity prior to starting the program. Students suggested e-mailing a math review or self-administered math quiz to students entering the program, with suggestions of ways to review material they feel uncomfortable with.
- (2) *Introduction to Mathematical Economics* (ECON-505) should be a prerequisite for Microeconomics (ECON-500), and specifically noted that taking ECON-505 and ECON-500 concurrently was difficult. Students suggested that a more appropriate first semester combination of courses for full time students would be 505, 501 and 523, postponing ECON-500 until the second semester.
- (3) Comprehensive exams should better reflect what students have studied in their core theory courses, rather than what has been covered in the most recent semester of the core theory courses. Students would prefer a more standardized test. This test could be longer but with more question choices. The Department should provide a list of topics that will be tested on the comprehensive exam, with sample questions and answers.

All students attending the focus group expressed that they felt confident that they could solve models mathematically and explain the results. They also felt confident in their ability to employ and interpret the results from an econometric model.

Economics
PhD Program

1. Learning Outcomes: Approved by Faculty November 2008

Graduates of the PhD Program will be able to:

1. demonstrate mastery of one branch of economic theory: micro, macro, or heterodox analysis;
2. demonstrate mastery of an applied field of knowledge within the discipline of economics; and
3. formulate and answer empirically an original question in a field of economics.

2. Assessment Plan: Approved by Faculty November 2008, with draft amendments May 2009*

Measures	Target	Learning Objectives	Cycle and Reviewers
Comp and Prelim Exam Graders' Report	Exam graders find that 80% completed exams demonstrate student competency in learning outcomes.*	1	Within one month after submission of grades for the PhD comprehensive exams, the Graduate Studies Committee will convene a meeting of Comp Graders to obtain their reports on strengths and weakness of PhD candidates based upon the written responses in the examinations. The Committee will include notes from the meeting in the Assessment Report presented to the Chair and the Council each March.
Dissertation Chairs' Report	Instructors find that at least 80% (most) of dissertations demonstrate student <i>mastery</i> of learning outcomes and that 100% (all) completed dissertations demonstrate student <i>competency</i> in learning outcomes.*	2-3	Each year, the Graduate Studies Committee will convene a meeting of dissertation chairs to obtain their reports on strengths and weakness of PhD candidates. The Committee will include notes from the meeting in the Assessment Report presented to the Chair and the Council each March.
Focus Group of Recent Graduates	90% (nearly all) students express confidence in their ability to meet departmental goals.*	1-3	Prior to March 1 each year, the Graduate Studies Committee will convene a focus group of recent graduates. The Committee will summarize the proceeding of the focus group in the Ph.D. Assessment Report presented to the Chair and the Council each March.

* May 2009 draft of targets; adoption requires endorsement of Graduate Studies Committee and vote of Council in Fall 2009.

3. History of Program Changes Made Based on Assessment

What assessment activity did you conduct?	What did you learn about your program as a result? Please be specific about the learning outcomes and targets.	How are you using your findings to improve your program? Please provide examples of changes you have made or are making.
2004 PhD Instructors' Report to the Council and Chair	Instructors felt students in the program were not getting a good balance. "Political Economy" in the vernacular didn't describe what we were doing or the field. "Heterodox micro" describes the practice of using modern tools to challenge mainstream, and this more accurately describes what we do. Relevant to outcomes 1-3	In 2005, we reorganized our PhD Program. Students emphasize micro or macro and all students are exposed to both mainstream and heterodox approaches.
2006 Comprehensive Exam Readers Report to the Council and Chair	Comp readers found that advanced theory comp did not reflect the movement towards specialization in micro or macro that has been developing in the field. Relevant to outcome 1.	In 2007 changed comp exam requirements to better reflect the students' choice of a focus on macro or micro.
Spring 2009 compilation of direct and indirect measures as detailed in Assessment Plan and reported by Graduate Studies Committee	As this was the first year of implementation of the full assessment plan, the department had not set specific targets. However, Prelim and Comp Graders indicated that exams revealed that competent performance on the Prelim is not a good predictor of competent performance on the Comp. (See full report for detail.) Dissertation Chairs expressed concern about quality of writing.	The Council tasked the Graduate Studies Committee with the following action items for improving student learning: <ol style="list-style-type: none"> 1. The Graduate Studies Committee will facilitate a discussion of improving feedback to students on prelim and comp exams. 2. The Graduate Studies Committee will explore ways to improve student writing, including considering more effective use of university resources.

4. History of Changes Made in Assessment Process

AY 2008-2009

- During the month of October 2008, the department conducted an assessment audit. The results of the assessment audit are reported in the "History of Program Changes Made Based on Assessment."

- On November 12, the Chair, MA Program Adviser, and PhD Program Adviser met with department Faculty to formalize learning objectives for MA and PhD programs. The results of the assessment audit were used to identify methods of assessment for graduate programs.
- The graduate program assessment plans were approved by the Faculty via electronic vote on November 15, 2008.
- The full assessment plan was implemented during the Spring 2009 semester. The Undergraduate and Graduate Studies Committees submitted reports to the Department Chair and Council (attached) and the Council held its Assessment Meeting on April 8, 2009. The Council endorsed the following action items for improving assessment, as recommended by the Committee: The Undergraduate Studies Committee will better define the learning outcome “finding data.” (That is, develop more specific goals including: What data do we want them to find? What sources should they know? What processes should they be familiar with? That is, the Committee will develop a rubric.) Additionally, the Committee and Council will consider targets for learning outcomes in Fall 2009.
- The full assessment plan was implemented during the Spring 2009 semester. The Graduate Studies Committees submitted its report to the Department Chair and Council (attached) and the Council held its Assessment Meeting on April 8, 2009. The Council endorsed the following action item for improving assessment, as recommended by the Committee: The Graduate Studies Committee will consider whether the prelim (and therefore the graders’ report) is giving us useful information on learning outcomes.

Attachment: Graduate Studies Committee Report to Chair and Council, 2009

To: Chair and Council
From: Graduate Studies Committee
Date: April 1, 2009
RE: Assessment Data on PhD Program

We are pleased to submit the report on assessment of the Master's program in economics for the department's assessment meeting in April 2009. The Comprehensive Exam Graders' Report and the Dissertations Chairs' Report appear below. A focus group was not conducted in this assessment cycle.

The committee considered a large number of potential action items, from which they chose the following few to focus on in the coming academic year:

Recommended action items for PhD Program:

- The Graduate Studies Committee will facilitate a discussion of improving feedback to students on prelim and comp exams.
- The Graduate studies committee will explore ways to improve student writing, including considering more effective use of university resources.

Recommended action item for improving assessment of PhD Program: The Graduate Studies Committee will consider whether the prelim (and therefore the graders' report) is giving us useful information on learning outcomes.

Comprehensive Exam Graders' Report

March 2009

Recent exam pass rates shows an increase in students who pass their prelims but subsequently fail their advanced theory comp or even a field comp. Committee members consider this undesirable and believe that it suggests a need for improved feedback at the preliminary examination stage. While expectations of technical mastery already appear to be appropriate in the prelim exam, later comps require more breadth of master and capability to provide interpretation of theoretical and empirical literatures.

Dissertation Chairs' Report

March 2009

Dissertation chairs expressed concerns about student preparedness, especially in the following areas:

- Understanding of the nature of independent research;
- Topic selections that are too amorphous/ambitious or too narrow/parochial (esp. those topics related to the current employment of students);
- Topic selection unrelated to faculty expertise;
- Speed of completion (esp. related to working before defense)
- Writing ability of ESOL students
- Students who attempt to write in a field without having taken the field courses.

Focus Group Report

n/a

Appendix A

The Content Specifications of the TUCE Microeconomics Exam are itemized on pages 2 and 9 of the TUCE-4 Manual; the text is included below. For Microeconomics, Items B, D, and E correspond to the Department's Learning Objective 1. For Macroeconomics, Items B,C, and D correspond to the Department's Learning Objective 2.

in microeconomics or macroeconomics (with 40 students in micro and 43 in macro).

The results from the pretest field-testing were analyzed to identify and replace a relatively small number of items with problems. Those revisions yielded a third draft of the TUCE-4 for a "post-test" field-testing conducted at the end of the spring 2005 semester. The third draft of the micro exam was administered to 635 principles students at six universities and the third draft of the macro exam was administered to 1,879 principles students at seven universities.

During this time period, comments on the third draft were provided by a national panel of distinguished economists. The members of this review panel were: Ted Bergstrom, University of California-Santa Barbara; Daniel Hamermesh, University of Texas at Austin; Alan Krueger, Princeton University; W. Douglas McMillin, Louisiana State University; Arthur J. Rolnick, Federal Reserve Bank of Minneapolis; Paul Romer, Stanford University; and Michael Salemi, University of North Carolina-Chapel Hill. Most members of the panel reviewed either the micro or macro exam, but a few reviewed both exams.

The comments from this national panel and the data analysis from the spring posttesting were reviewed by Watts, Walstad, and Melican at a July 2005 meeting. Test items with weak item statistics were eliminated and other questions were deleted or revised to address concerns raised by the national panel, often to strengthen a particular distractor or wording in a question stem. The full TUCE-4 revision committee participated in writing replacement questions and revising these questions. This resulted in the fourth and final draft of the TUCE-4, which was used for the fall 2005 national testing.

2. CONTENT SPECIFICATIONS

The test development committee prepared the following content categories for the microeconomics test and set the following recommended percentage ranges (shown in parentheses) for the allocation of test items.

- A. **The Basic Economic Problem** (scarcity, opportunity cost, choice) (10–15%)
- B. **Markets and Price Determination** (determinants of supply and demand, utility, elasticity, price ceilings and floors) (20–25%)
- C. **Theories of the Firm** (revenues, costs, marginal analysis, market structures) (25–30%)
- D. **Factor Markets** (wages, rents, interest, profits, income distribution) (10–15%)
- E. **The (Microeconomic) Role of Government in a Market Economy** (public goods, maintaining competition, externalities, taxation, income redistribution, public choice) (15–20%)
- F. **International Economics** (comparative advantage, trade barriers, exchange rates) (10–15%)

These specification categories are basically the same as those found on TUCE-3, although some of the general descriptions are new, with the older lists of concepts moved to the parenthetical listings of topics for greater format consistency across topics. The stability in general content categories is also reflected in the test items. There are, in fact, only seven entirely new questions on this exam, with 23 items taken from the third edition, though often revised. This "default" position of staying with items from earlier editions, unless there were reasons to change based on minor revisions in the content specifications or problems with item statistics, was explicitly endorsed by the test revision committee. That was done partly because the committee viewed the TUCE-3 micro exam as still generally strong and viable, but also because the time and budget constraints for developing and, especially, field-testing new and substantially revised items were very tight.

As always, it was difficult to find items acceptable to large numbers of economists teaching at different colleges and universities—and which

also exhibited good item statistics. In a few cases we tried new items on the field-test version of the exam, but reverted to the old item (sometimes revised) if the item statistics or comments from external reviewers suggested problems with the new question. There are, however, some questions on new topics, and in new formats, on the micro TUCE-4 exam. For example, there is a question on game theory, which is now covered in virtually every principles of economics textbook. And for the first time ever on the TUCE, one question features a simple graphical model.

An international category is included on both tests. The last three questions on the micro test cover international concepts with a micro orientation (comparative advantage, trade barriers, and exchange rates), while the last three questions on the macro test focus on international concepts with a macro orientation (balance of payments, exchange rate systems, open-economy macro). The committee thought that international concepts are now routinely covered in both principles courses, but recognized that there may be greater variance in the coverage or emphasis given to the international concepts by instructors and textbook authors and publishers.

The content specifications and recommended percentage ranges for the allocation of test items on the macroeconomics exam for the TUCE-4 are:

- A. Measuring Aggregate Economic Performance** (GDP and its components, real vs. nominal values, unemployment, inflation) (10–15%)
- B. Aggregate Supply and Aggregate Demand** (potential GDP, economic growth and productivity, determinants and components of AS and AD, income and expenditure approaches to GDP, the multiplier effect) (25–30%)
- C. Money and Financial Markets** (money, money creation, financial institutions) (10–15%)
- D. Monetary and Fiscal Policies** (tools of monetary policy, automatic and discretionary fiscal policies) (25–30%)
- E. Policy Debates** (policy lags and limitations, rules vs. discretion, long run vs. short run, expectations, sources of macroeconomic instability) (10–15%)
- F. International Economics** (balance of payments, exchange rate systems, open-economy macro) (10–15%)

The macro specifications were revised more because of the greater changes that have occurred in the content and teaching of macroeconomic principles courses since the last revision of the TUCE. For example, aggregate supply and demand models are used in most principles courses and textbooks, but not always, and some recent textbooks written by prominent economists have made a major point in not using them. There has also been some de-emphasis in the coverage of “competing schools” (classical, Keynesian, monetarist, new classical, post-Keynesian, etc.), and in calculating various multipliers. Changes in monetary policy rules and regimes, and in empirical and theoretical models of such topics as economic growth, are also affecting the content of most macro principles courses and textbooks. This revision reflects those changes and whatever content consensus there is for a course on macroeconomic principles. As a result, there are 10 new items on the TUCE-4 macro exam, and extensive revisions on most of the 20 other items taken from the third edition of the TUCE.

Tables 1 and 2 classify each of the 30 micro and macro TUCE-4 questions, respectively, in the six broad content categories identified in the content specifications listed above. The main purpose of these content specifications is to ensure that items on the test cover the core content in a “typical” principles course. If that is done successfully, the total raw score on the exam provides a useful measure of students’ general understanding of basic economics principles.