

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA  
ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE  
REPORT TO  
THE ACADEMIC SENATE

AP-065-167

MS in Economics

Academic Programs Committee

Date:

Executive Committee  
Received and Forwarded

Date: 01/04/2017

Academic Senate

Date: 01/11/2017  
First Reading  
02/01/2017  
Second Reading

**BACKGROUND:** The Department of Economics has proposed a MS in Economics program for the semester system. This is a revised program.

The department has proposed to discontinue two existing options in MS in Economics under the quarter program and proposed a revised MS in Economics program without options for the semester system. The department proposed the change based on the available faculty resources. Offering the MS in Economics program without options will maximize the resources and help to maintain a current and rigorous curriculum.

**RESOURCES CONSULTED:**

Deans

Associate Deans

Department Chairs

All Faculty

**DISCUSSION:**

Before reaching the Academic Programs Committee, this program was reviewed by the College Curriculum Committee in the College of Letters Arts and Social Sciences as well as the Dean of CLASS and the Office of Academic Programs. All concerns raised at those levels were addressed. The Academic Programs Committee then conducted campus-wide consultation, as well as its own review of the program. No concerns were raised.

**RECOMMENDATION:**

The Academic Programs Committee recommends approval the MS in Economics program for the semester system.

<b>Economics M.S.: 36 units</b>							
<b>Status</b>	active						
<b>Hierarchy Entities</b>	Economics						
<b>Approval Process Name</b>	I. Program - Q2S Existing Program/Option/Minor						
<b>Current Step</b>	Office of Academic Programs						
<b>Originator</b>	Bruce Brown						
<b>Created</b>	12/14/2015 04:53PM						
<b>Launched</b>	12/14/2015 05:01PM						
<b>Form</b>							
<b>General Catalog Information</b>							
<b>Department</b>	Economics						
<b>Conversion Category:</b>	Revised						
<b>Proposal Type:</b>	Program						
<b>Describe or list changes</b>	<p>(1) Entire program now more standard and systematic</p> <p>(2) Graduate options eliminated. Now one set of requirements for all students</p> <p>(3) Units from all three Graduate Preparation courses (Microeconomics, Macroeconomics, and Quantitative) now count toward degree.</p> <p>(4) 36 semester units = 12, 3-unit classes required; this will not be an increase in course work for students who entered as conditional admits under the old system, as they were required to take several courses which did not count toward degree requirements.</p> <p>(5) Graduate students may take fewer 4400-level courses. Now students may take a maximum of four courses numbered from EC 4404 to EC 5503 inclusive, (with the exception of EC 4462, the undergraduate Senior Seminar course). For the majority of graduate students who take EC 5501, EC 5502, EC 5503, they will be able to count one EC 44xx course toward the degree.</p> <p>(6) EC 4408 and/or EC 4410 will no longer be required of any graduate student entering Fall 2018 and after.</p> <p>(7) New ECOs were written for all Economics Graduate courses, extending and deepening existing content as result of the extended teaching hour in the semester system.</p> <p>(8) Four courses were discontinued:                      EC 659 Seminar in Transportation Economics                      EC 665 Economic Development                      EC 666 Economic Planning                      EC 697 Comprehensive Examination</p> <p>(9) Additional content topics added to the following courses:                      EC 5502 - particularly relevant material from Calculus                      EC 5552 - particularly relevant material from Matrix Algebra</p>						
<b>Semester Program Name (e.g. Biology, B.S., Art History, B.A.)</b>	Economics M.S.: 36 units						
<b>Program Description</b>	<p>The Cal Poly Pomona Economics Department offers a rigorous and quantitatively oriented 2-year, Masters of Science Program. Students who have successfully completed economic principles, statistics and calculus are well suited to enter the program. Intermediate level material is presented in three Graduate Preparation courses offered in Fall semester. These preparation courses are required for students who did not successfully complete the analogous undergraduate courses, and optional for those who did.</p> <p>The Program has been particularly strong in Econometrics, Financial Economics and Environmental Economics. The Department strives to maintain and extend these strengths.</p> <p>Required courses are offered in evenings to allow students who are employed full-time to complete the M.S. students who take 3 courses per semester may complete the program in two years (four semesters), while those who take two courses per semester may complete the program in three years. For the M.S. degree 36 semester units, the equivalent of 12, 3-unit classes are required.</p> <p>The program prepares students for career positions as economists in the private sector; the public sector, and academia. The M.S. degree qualifies our graduates to teach at Community Colleges, or to enter Ph.D. programs well prepared.</p> <p>The Department currently has four Full Professors, two Assistant Professors and three retired faculty who teach part-time, but all of whom will be fully retired by Fall 2015. In addition, one of the current Full-Professors intends to retire (FERP) by Fall 2018. The program currently has 45 students enrolled.</p>						
	<table border="1"> <tr> <td>Economics M.S. Graduate Courses: 36 units</td> <td></td> </tr> <tr> <td></td> <td>Units</td> </tr> <tr> <td>Required Core Courses</td> <td>12</td> </tr> </table>	Economics M.S. Graduate Courses: 36 units			Units	Required Core Courses	12
Economics M.S. Graduate Courses: 36 units							
	Units						
Required Core Courses	12						

Curriculum Sheet	EC 5550	Microeconomics Analysis	3	
	EC 5551	Macroeconomics Analysis	3	
	EC 5552	Graduate Econometrics I	3	
	EC 5553	Graduate Econometrics II	3	
	Elective Graduate Courses**		18-23	
	EC 5501	Graduate Microeconomics Preparation	3	
	EC 5502	Graduate Quantitative Preparation	3	
	EC 5503	Graduate Macroeconomics Preparation	3	
	EC 6630	Advanced Environmental Economics	3	
	EC 6631	Advanced Natural Resource Economics	3	
	EC 6654	International Finance	3	
	EC 6655	International Trade	3	
	EC 6656	Money and Capital Markets I	3	
	EC 6657	Money and Capital Markets II	3	
	EC 6660	Graduate Public Finance	3	
	EC 6691	Directed Study	3	
	Culminating Experience		1-6	
	EC 6692*	Graduate Research Practicum I	3	
	EC 6693*	Graduate Research Practicum II	3	
	EC 6960*	Master's Degree Thesis	1-3	
	*Exceptional students may substitute EC 6960 for EC 6692 and EC 6693			
	** Minimum of two courses numbered 6630 to 6660 must be completed			
	Note:			
	i) Graduate Preparation Quantitative presents select material from Calculus			
	ii) Graduate Econometrics 1 presents select material from Matrix Algebra			
iii) Students taking 3 courses per term may finish in 4 semesters				
iv) Three 6600-level courses offered per year on rotating basis				
v) A Maximum of four courses numbered from 4404 to 5503 allowed				
Roadmap	Economics Graduate Program Roadmaps			
	Students with Different Prior Preparation and Pace Through Program			
	Students who take three courses per semester may complete degree requirements in two years.			
			Path 1	Path 2
	Year 1	Fall	EC 44xx or EC501	EC 5501
		Fall	EC 44xx or EC 502	EC 5502
		Fall	EC 44xx or EC 503	EC 5503
		Spring	EC 5550	EC 5550
		Spring	EC 5551	EC 5551
		Spring	EC 5552	EC 5552
	Year 2	Fall	EC 5553	EC 5553
		Fall	EC 44xx or 66xx	EC 44xx or 66xx
		Fall	EC 44xx or 66xx	EC 44xx or 66xx
		Spring	EC 44xx or 66xx	EC 44xx or 66xx
		Spring	EC 6692	EC 6692
	Spring	EC 6693	EC 6693	
Students who take only two courses per semester and students who need to acquire basic economic knowledge will need three years to complete degree requirements				
		Unconditional (2)	Conditional (2)	ConditionalPlus (3)
Year 1	Fall	EC 5501, 5503, or 44xx	EC 5501 or 5503	EC 2201
	Fall	EC 5502 or 44xx	EC 5502	and/or EC 2202
	Fall			
	Spring	EC 5550 or 5551	EC 5550 or 5551	Stat 1120



	Spring	EC 5552	EC 5552	and/or Math 1125	
Year 2	Fall	EC 5501 or 5503	EC 5501 or 5503	EC 5501	
	Fall	EC 5553	EC 5553	EC 5502	
	Fall			EC 5503	
	Spring	EC 5550 or 5551	EC 5550 or 5551	EC 5550	
	Spring	EC44xx or 66xx	EC44xx or 66xx	EC 5551	
	Spring			EC 5552	
Year 3	Fall	EC44xx or 66xx	EC44xx or 66xx	EC 44xx or 66xx	
	Fall	EC44xx or 66xx	EC44xx or 66xx	EC 5553	
	Fall			EC 44xx or 66xx	
	Spring	EC 6692	EC 6692	EC 44xx or 66xx	
	Spring	EC 6693	EC 6693	EC 6692	
	Spring			EC 6693	
		(2) may take two courses per semester			
		(3) may take three courses per semester			
Two-Year Course Offering	Economics Graduate Program Two Year Course Offerings				
	Course	Fall (even)	Spring (odd)	Fall (odd)	Spring (even)
	EC 5501	Kerr		Kerr	
	EC 5502	Hunter		Hunter	
	EC 5503	Forrester		Forrester	
	EC 5550		Kerr		Kerr
	EC 5551		Forrester		Forrester
	EC 5552		Hunter		Hunter
	EC 5553	Safarzadeh*		Safarzadeh*	
	EC 6630				Hunter**
	EC 6631				(Hunter**)
	EC 6654	Lange		Lange	
	EC 6655				(Lange*)
	EC 6656		Lange		
	EC 6657	Brown		Brown	
	EC 6660				
	EC 6691	Lange	Lange	Lange	Lange
EC 6692		Kerr		Forrester	
EC 6693		Kerr		Forrester	
EC 6696	Lange	Lange	Lange	Lange	
EC 6699	Lange	Lange	Lange	Lange	
	* Dr. Safarzadeh is a FERP faculty and currently teaches this course. After his full requirement a new faculty member will teach this course.				
	** Courses EC 6630, 6631 and 6655 are taught in 3 year cycle in Spring 2019, 2022, 2025 respectively				
	<p><b>Mission and Vision Statement</b></p> <p>The Cal Poly Pomona Department of Economics Graduate Program offers an M.S. degree to enable students to enter fulfilling careers in business, government and academia. The degree also prepares students for Ph.D. programs in Economics and related areas.</p> <p>The program benefits society, the university, and most fundamentally individual students by presenting economic theory, techniques and tools at the level required for career positions as economists. This includes an ability to fully understand the nuances of standard theories, the assumptions upon which they are built, their relevance for currently economic problems; and an ability to both extend as well as critique standard approaches. It also helps prepare students for the mathematical and statistical rigor of Ph.D. programs.</p> <p>The program allows students with a clear understanding of basic mathematics, statistics and economic principles demonstrated by their undergraduate record, to earn the MS degree in two years. Required courses are offered in the evening so working students can complete the degree. All students are required to complete a research project. This allows them to specialize and become an expert in one area, to master the theory and techniques more completely, and to become creators of new economic knowledge.</p> <p><b>Graduate Student Learning Outcomes.</b></p>				

Assessment Plan

Upon completing the MS in Economics, students should demonstrate measurable competencies in the following areas:

(1) The ability to clearly identify and compare a broad range of economic theories and concepts; and appropriately apply them in the analysis of economic events and government policy.

(2) Conduct projects of their own design that test and extend established theories and lines of research that address both fundamental and emerging topics of concern within the field.

(3) The collection, presentation, and analysis of economic cross-sectional or time-series data according to professional standards with the appropriate methods of statistical inference and technology.

(4) The use of mathematical tools in economic theory and modeling. Specifically, students should be able to derive important relationships from theory and conclusions from economic models.

Graduate	Course #	Graduate Student Learning Outcomes			
		1	2	3	4
Graduate Microeconomics Preparation	5501	D M	I	I D M	I D
Graduate Quantitative Preparation	5502	D M	I	I D M	I D
Graduate Macroeconomics Preparation	5503	D M	I	I D M	I D
Graduate Microeconomics	5550	D M	D	I D M	
Graduate Macroeconomics	5551	D M	D	I D M	
Graduate Econometrics I	5552	D M	D M	I D M	D M
Graduate Econometrics II	5553	D M	D M	I D M	D M
Graduate Environmental Economics	6630	D M	D	D M	D M
Graduate Natural Resource Economics	6631	D M	D	D M	D M
Economics of International Finance	6654	D M	D	D M	D M
Economics of International Trade	6655	D M	D	D M	D M
Capital Markets I	6656	D M	D	D M	D M
Capital Markets II	6657	D M	D	D M	D M
Graduate Research Project I	6692	D M	D M	D M	D M
Graduate Research Project II	6693	D M	D M	D M	D M
Master's Thesis	6696	D M	D M	D M	D M
Master's Degree Continuation	6699				

#### Curriculum Matrix

##### Legend

I = Students introduced to the outcome at a university-level appropriate for graduate students

D = Students have the opportunity to further develop this outcome.

Similar to D = "practice and/or R = "reinforce"

M = Students can demonstrate basic mastery at the exit level.

##### Methods of Assessment:

##### A. Formative Assessments

(1) A small set of questions will be asked on final exams in Graduate Microeconomics (EC 5550) and Graduate Macroeconomics (EC 5551). Results from trends in student performance on these questions will be tabulated by the Department Graduate Coordinator and results discussed by the Department as a whole.

(2) Graduate Research Projects from EC 6692 & 6693 will be reviewed by the Graduate Coordinator and the Instructor for EC 6692 & 6693 (if the graduate coordinator has taught these courses, then another Department member will serve). The success of students in demonstrating mastery of the specific learning outcomes by their projects will be evaluated.

##### B. Summative Assessments

(1) The Department will develop online survey tools for feedback from past graduates; one survey for most recent graduates and another for graduates who completed their work approximately five years before. This tool will be located on the Department Website. Social media (e.g., Linked-In) will be used to locate email addresses of former graduates and a link to the survey sent to them. This survey will focus on elements of our program which most effectively contribute to perceived student success, post-graduation.

(2) The Department will examine university data regarding graduate student success in terms of timely completion of degrees.

##### Feedback Loop:

The Graduate Coordinator will review data from the above assessment instruments and present it to the Graduate Committee of the Economics Department. Changes in the curriculum and in specific courses will be based on the findings.

##### Timeline for Assessment

Prior to AY 2018/19

(1) Develop set of standard questions to be asked to all students taking final exams in Graduate Microeconomics and Graduate Macroeconomics.

(2) Construct rubric for evaluation of Graduate Research Project developed by Graduate Coordinator, with input and assistance from department colleagues.

	<p>Prior to AY 2020/21                  (1) Online alumni survey tools will be operational. Recent and past alumni will be contacted by email, informed of the survey and requested to participate.                  Start of AY 2021/22                  - Results of online alumni survey discussed by department at Fall Conference or other dedicated Department meeting.                  Ongoing basis after AY 2018/19                  (1) Data from embedded assessment questions in Graduate Microeconomics and Graduate Macroeconomics will be tabulated, summarized and discussed by Graduate Committee every two years.                  (2) Data from review of Graduate Research projects tabulated, summarized and discussed by Graduate Committee every two years.</p>
Select Program	Program
Prospective Curriculum	
<b>Steps</b>	
<b>Files</b>	None