BS Economics Major and Minor AY 21-22 Aggregate Assessment Report

Aggregate Major and Minor Assessment Report for AY 2021-2022 Prepared by Michael Jonas, Undergraduate Program Director (mrjonas@usfca.edu)

Mission Statement

No recent changes

"With a particular focus on international issues of globalization and poverty, the mission of our department is to equip undergraduate and graduate students with the character and rigorous intellectual foundation in economics to help our students foster a more just and humane world and to carry out a research agenda that contributes at the highest levels to micro and macroeconomics issues related to poverty, economic growth, and globalization."

Program Learning Outcomes

No recent changes to PLO's

1. Economic literacy

Students will engage in the systematic study of foundational economic concepts and relate them to economic problems and phenomena faced by people and firms.

2. Economic theory

Students will use mathematical models, relational diagrams, and optimization techniques from microeconomic and macroeconomic theory to analyze real-world economic problems and generate testable predictions about economic phenomena.

3. Empirical economics

Students will apply quantitative statistical analysis and experimental methods to conduct data-driven inference, interpret figures and statistical tables, test theories, and identify causal relationships.

4. Economic citizenship

Students will employ economic reasoning and quantitative techniques to evaluate and critique economic policies, arguments, and social problems, with a particular emphasis on the role economics plays in advancing human well-being for the poor and disadvantaged.

Curricular Map

The curricular map shown below is the same for the major and minor. However, since minor students are not required to follow a particular path through the curriculum, and may choose electives from a variety of topics, they may not necessarily achieve "mastery" or "application" status for any particular outcome.

University of San Francisco College of Arts and Sciences Department of Economics Curriculum Map

I = Concept Introduced
C = Comprehensive Coverage of Concept
A = Applications of Concept

Courses in Economics Major	PLO #1: Economic literacy	PLO #2: Economic theory	PLO #3: Empirical economics	PLO #4: Economic citizenship
Foundation				
Courses				
ECON 111			1	
Principles of	I	'	l I	I
Microeconomics				
ECON 112 Principles of Macroeconomics	I	I	I	I
ECON 120 Economic Methods	А	С	C & A	I
ECON 311 Intermediate Microeconomics	С	С		А
ECON 312 Intermediate Macroeconomics	С	С	I	С
ECON 320 Econometrics	С	С	С	С

Courses in Economics Major	PLO #1: Economic literacy	PLO #2: Economic theory	PLO #3: Empirical economics	PLO #4: Economic citizenship
Elective Courses				
ECON 230 Environmental Economics	I	I	I	I
ECON 280 The Global Economy	1 & A	1 & A	1 & A	С
ECON 300 U.S. Economic History	С	I	I	А
ECON 306 Economies of Modern Europe	А	I	С	А
ECON 318 Game Theory	Α	С		А
ECON 350 Money and Banking	С	I	I	I
ECON 365 Behavioral Economics	С	C & A		C & A
ECON 370 International Economics	С	C & A		C & A
ECON 372 Development Economics	С	C & A	С	А

Courses in Economics Major	PLO #1: Economic literacy	PLO #2: Economic theory	PLO #3: Empirical economics	PLO #4: Economic citizenship
Elective Courses				
ECON 415				
Mathematics for	Α	Α		
Economists				
ECON 416				
Special Topics in	Α	Α		
Mathematics for	^			
Economists				
ECON 424				
Internet Data	I	1	A	Α
Sources				
ECON 451				
Monetary	Α	C & A	A	Α
Economics				
ECON 455				
Options and	Α	A		
Futures				
ECON 463				
Experimental	C&A	Α	C&A	C&A
Economics				
ECON 465 Law	С	C & A		C & A
and Economics				
ECON 471	Α	Α	CC	Α
International				
Finance				
ECON 476				
Natural Resource				
Economics and	Α	С	С	С
Development				
Policy				
ECON 477				
International	Α	Α	Α	Α
Political	/\			/ \
Economy				

Courses in Economics Major	PLO #1: Economic literacy	PLO #2: Economic theory	PLO #3: Empirical economics	PLO #4: Economic citizenship
Capstone				
Courses				
ECON 425 Senior				
Seminar in	Α		A	_
Financial	/ (/ \	
Econometrics				
ECON 427 Senior				
Seminar in	Α		Α	C
Applied	^			
Econometrics				

*Note that ECON 280 should be removed from the BS ECON and ECON minor curricular map, as it does not count for major elective credit.

Assessment Schedule

Year	PLO Assessed with Direct Methods
AY 2017-18 (First Year of New PLO's)	PLO #3 Empirical Economics
AY 2018-19	PLO #2 Economic Theory
AY 2019-20	Alternate Remote Reflections Report
AY 2020-21	PLO #1 Economic Literacy
AY 2021-22	PLO #4 Economic Citizenship
AY 2022-23	APR

Description of Direct Assessment Methodology of PLO #4

Student work products used for direct assessment the empirical research projects assigned in ECON 320 (Introduction to Econometrics) and ECON 427 (Applied Econometrics Capstone), both of which require students to relate their theoretical approach and empirical findings to issues of poverty and human well-being. For example, if a student gathers data and conducts analysis explaining why unemployment varies across countries and over time, they would need to clearly explain how the economic theory and literature relates unemployment to poverty rates and measures of well-being. This component is built into the final project assignment for both ECON 320 and 427, the only difference being the level of sophistication and quantity of the empirical models used. Student work product examples are available upon request.

Work products were taken from ECON 320.01 in Fall 2021, ECON 320.01 in Spring 2022, and ECON 427.01 in Spring 2022. While primarily composed of economics majors, approximately 15% of students in the ECON 320 sections were economics minors. Thus, we are applying this assessment to both the major and minor.

Rubric For Assessment of PLO #4

The rubric applied breaks up the elements of the PLO being assessed into component parts, each of which is directly assessed using the associated element of the student work product (eight parts of the exam question). The requirement to achieve the given level (Inadequate, Introductory, Developing, Mastery) are clearly articulated within the rubric.

PLO#4 Component	Mastery of Knowledge Score =4	Developing Knowledge Score = 3	Introduction Knowledge Score = 2	Inadequate Knowledge Score=1
Employs Economic Reasoning to evaluate policies, arguments, problems	Student shows extensive understanding of both relevant economic theory (reasoning) or how it applies to the policy/argument/ problem at hand. Is able to combine multiple theories and clearly explain relative merits of each in the appropriate context.	Student has a solid understanding of both relevant economic theory (reasoning) or how it applies to the policy/argument/ problem at hand.	Student has a limited understanding of either relevant economic theory (reasoning) and/or how it applies to the policy/argument/ problem at hand.	Student shows little or no understanding of relevant economic theory (reasoning) nor how it applies to the policy/argument/ problem at hand.
Employs Quantitative Methods to evaluate policies, arguments, problems	Student uses appropriate data and empirical methods to meaningfully explore concept. Clearly links hypothesis begin tested to underlying concept.	Student shows solid understanding of appropriate methods, how to utilize methods, and interpret results.	Student understands the elements of appropriate empirical methods, displays rudimentary understanding of how to utilize and interpret findings.	Student fails to display understanding of methods and results.
Is able to relate economic theories and models to the role economics plays in advancing human wellbeing for the poor and disadvantaged	Student fully understands and communicates the context of theory/model with respect to poverty/well-being issues. Able to give examples of policy and/or outcome implications	Student shows solid understanding of the implications of theory/model with respect to poverty and wellbeing issues. Place in literature not fully developed.	Student shows rudimentary understanding of the implications of theory/model with respect to poverty and wellbeing issues Relevant policy literature not cited.	Student fails to clearly draw useful conclusion from model/theory wrt poverty and well-being issues.

Direct Assessment Results

Below are the frequency tables associated with student outcomes based on the rubric above. Assessment was completed by course instructor Michael Jonas.

ECON 427 Spring 2022 (11 Students)

PLO #1	Mastery of	Developing	Introduction	Inadequate
Component	Knowledge Score	Knowledge	Knowledge	Knowledge
	=4	Score = 3	Score = 2	Score=1
Employs	3/11	7/11	0/11	1/11
Economic				
Reasoning				
Employs	8/11	3/11	0/11	0/11
Quantitative				
Methods to				
evaluate				
Is able to relate	4/11	5/11	1/11	1/11
economic				
theories				
Overall	7/11	3/11	1/11	0/11

ECON 320 SPRING 2022 (14 Students)

PLO #1	Mastery of	Developing	Introduction	Inadequate
Component	Knowledge Score	Knowledge	Knowledge	Knowledge
	=4	Score = 3	Score = 2	Score=1
Employs	3/14	3/14	4/14	4/14
Economic				
Reasoning				
Employs	6/14	3/14	1/14	4/14
Quantitative				
Methods				
Is able to relate	5/14	3/14	2/14	4/14
economic				
theories and				
models				
Overall	5/14	3/14	2/14	4/14

ECON 320 FALL 2021 (17 Students)

PLO #1	Mastery of	Developing	Introduction	Inadequate
Component	Knowledge Score	Knowledge	Knowledge	Knowledge
	=4	Score = 3	Score = 2	Score=1
Employs	5/17	6/17	2/17	4/17
Economic				
Reasoning				
Employs	5/17	6/17	4/17	2/17
Quantitative				
Methods				
Is able to relate	4/17	6/17	5/17	2/17
economic				
theories and				
models				
Overall	5/17	6/17	4/17	2/17

Results Discussion and Closing the Loop: This is the most difficult of our PLO's both for students to achieve mastery of, as well as observers to assess directly. The students' difficulty comes from having to achieve a solid understanding of economic theory and models first, and then be able to adequately express how those theories relate to issues of poverty, inequality and well-being.

The percentage of students achieving mastery of this PLO is relatively low compared to PLO's 1-3 assessed based on similar research assignments. This may partially be due to inadequate focus on this outcome in the assignment instructions. Students know that their grade will be largely based on mastery of the technical skills, and thus likely put less effort and emphasis on expressing how their results relate to the "citizenship" aspect of their learning.

We will be addressing this issue in two ways. First, the instructions and examples given for the research project assignments in ECON 320 and 427 will more clearly elucidate the "economic citizenship" issue and expectations. Second, other core required major classes (ECON 311 Intermediate Microeconomics, ECON 312 Intermediate Macroeconomics) will explicitly incorporate this issue into at least one assignment or exam question. Student work products from these assignments will be used in future assessments of PLO #4.

Appendix: Current Composition of the ECONOMICS MINOR

As of May 2022, there were 42 economics minors, from 13 different majors, with 33 from majors housed in SOBAM.

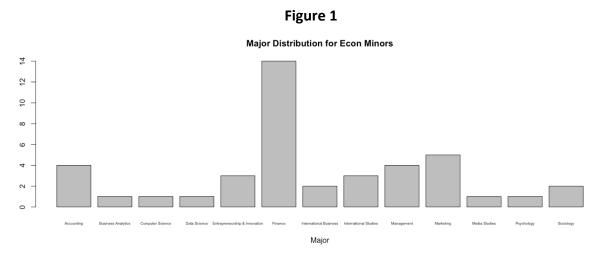


Figure 1 shows the distribution of majors amongst our economics minors as of AY21-22. An effort will be made to communicate the benefits of the economics minor to majors outside of the school of business.

The sample mean of cumulative GPA for our minors is 3.50.

Our minors are required to complete both Principles of Microeconomics and Macroeconomics (ECON 111 and 112, respectively), and either Intermediate Micro- or Macroeconomics (ECON 311 or 312). Therefore, it is not surprising that these are the courses most frequently taken by these students.

Figure 2 below shows the full frequency distribution of courses completed by our minors in F'21 and S'22. It should be noted that ECON 365 and 368 are both two-unit courses typically taken as a pair in a single semester. Overall, econ minors averaged 2.67 units of economics courses in Fall '21, and 2.47 units in Spring '22.

Figure 2

