

Annual Assessment of Program Learning Outcomes

Section I: Academic Details

1. Assessment Year

AY 2014-2015

2. College/School

College of Arts & Sciences

3. Degree Program Name and Modality of Delivery (e.g., online, on-ground, hybrid)

Economics – undergraduate – on-ground

Section II: Program Learning Outcomes Assessment

4. Program Learning Outcome Assessed

Understand economic terminology and the fundamental theoretical approaches of the discipline.

5. Indicate how the PLO mentioned in Question #4 aligns with one or more of the Institutional Learning Outcomes (ILOs)

ILO2 (Students explain and apply disciplinary concepts, practices, and ethics...)

6. Indicate which of the following Direct Measures of Assessment were used to assess the PLO mentioned in Question 4

Class Tests & Quizzes with Embedded Questions

7. Indicate which of the following Indirect Measures of Assessment were used to assess the PLO mentioned in Question 4

None

Section III: Results

8. Mention KEY Results of the Assessment Process

Questions measuring specific course and program learning outcomes were embedded in the final examinations for all sections of ECON 101, 102, 111, 112, and 312. Please see attached tabulations.

The most notable pattern is the ***different levels of mastery demonstrated by students in the 3-unit Principles classes (ECON 101 and 102) relative to the 4-unit classes (ECON 111 and 112).***

In Fall 2014, the mean score on the Microeconomics assessment question was 75% for ECON 101 students, compared to 80% for ECON 111 students. Likewise, only 18% of ECON 101 students scored above 90% on the question, while 36% of ECON 111 students did. Results are similar for Spring 2015.

For the Macroeconomics embedded question, Fall 2014 mean scores for ECON 102 were 76% compared to 82% for ECON 112, and the percent of students scoring above 90% was 29% compared to 41%. Again, the same pattern holds for Spring 2015.

These results suggest that students enrolled in the 3-unit classes are systematically underperforming relative to students enrolled in the 4-unit classes. While this may be partially attributable to baseline aptitude and skill levels (the 3-unit classes are only open to students from the School of Management, while the 4-unit classes are populated with both CAS and SOM undergraduates), it is also plausible that the reduced seat time and larger class sizes of the 3-unit classes contributes to less effective learning outcomes.

Turning to the results for Intermediate Macroeconomics (ECON 312), it is clear that mastery of the material improves substantially as (self-selected) students move into the more advanced treatments. Looking only at endline (end of semester) scores on the embedded questions in 2 sections of this course, between 44% and 64% earned "A" grades.

Section IV: Continuous Improvement

9. Indicate Actions the Program Faculty Have Taken in Response to Results

Curriculum Changes (e.g., addition and/or deletion of courses)

We have phased out the large (65 enrollment cap) 3-unit Principles of Microeconomics (ECON 101) and Principles of Macroeconomics (ECON 102) classes in favor of smaller (40 enrollment cap) 4-unit classes (ECON 111 and ECON 112) for all students. This will allow more thorough coverage of the material, pedagogical flexibility, and greater opportunity for faculty-student interaction.

Improved within and across school/college communication and collaboration

These changes have been implemented in consultation with School of Management leadership, who also recognized the disadvantages of having their students take 3-unit versions of the Principles classes. As of Spring semester 2016, SOM students will be fully integrated into the 4-unit classes with CAS undergraduates.

Assessment Report for Principles Courses

1. Principles of Microeconomics

A. Micro Economics Assessment Question:

Ian offers his mowing services in the perfectly competitive lawn mowing industry. He has **fixed costs of \$7** per day (the cost of renting the mower), and variable costs as shown in the table below.

...table...

- a. What are Ian's total costs of production? Fill in the **Total Costs** column of the table.
- b. Calculate Ian's profit when the market price is \$8 per lawn and fill in the corresponding column of the table.
- c. Calculate Ian's average total costs, average variable costs, and marginal costs of production, and fill in the corresponding columns of the table.
- d. If the market price of mowing lawns is \$8 per lawn, how many lawns will Ian mow?
Q* = _____
- e. At this price (\$8), what is his profit at this level of production? _____
- f. At this price (\$8), will he continue to mow lawns in the short run? _____
- g. Now calculate Ian's profit when the market price is \$3.60 per lawn and fill in the corresponding column of the table.
- h. If the market price of mowing lawns is \$3.60 per lawn, how many lawns will Ian mow?

- i. At this price (\$3.60), what is his profit at this level of production? _____
- j. At this price (\$3.60), will he continue to mow lawns in the short run? _____
- k. Graph the ATC, AVC, and MC curves on the following figure.
...graph...
- l. On the graph above, show Ian's profit maximizing level of production and profit when the market price is \$8.
- m. At what price will Ian just break even? _____
- n. At what range of prices for lawn mowing will Ian earn a loss but continue to produce in the short run?
- o. At what range of prices for lawn mowing will Ian shut down his lawn mowing service in the short run? _____
- p. Identify Ian's short-run individual supply curve on the graph.
- q. Starting with a market equilibrium price of \$8.00, explain what will happen in the long run in this market? Be as specific as possible.
- r. Explain, using the concepts of the production function and average total costs, the long run impact of adopting new technology that increases the marginal product of labor. (you don't have to show the graph, just explain)

B. Microeconomics Results

Fall 2014*

Econ 111 (4 unit course)		Econ 101 (3 unit course)	
Sections Offered	3	Sections Offered	3
Total Enrollment	130	Total Enrollment	196
Percent of Students with score >90%	36%	Percent of Students with score >90%	18%
Percent of Students with score >70%	81%	Percent of Students with score >70%	64%
Mean Score	80%	Mean Score	75%

Spring 2015*

Econ 111 (4 unit course)		Econ 101 (3 unit course)	
Sections Offered	3	Sections Offered	3
Total Enrollment	133	Total Enrollment	200
Percent of Students with score >90%	27%	Percent of Students with score >90%	11%
Percent of Students with score >70%	83%	Percent of Students with score >70%	52%
Mean Score	78%	Mean Score	69%

2. Principles of Macroeconomics

A. Assessment Question

Aggregate Supply, Aggregate Demand, and Long Run Equilibrium

- A.) (5 pts) using the AD-AS Model, please show the economy in Short Run equilibrium (actual GDP) and Long Run Equilibrium (potential GDP). Use a graph, label all curves and axes. (assume there is no gap)
- B.) (2 pts) List at least four events that impact AD (i.e. cause AD to shift to either left or right).
- C.) (2 pts) List four events that impact the position of short run AS.
- D.) (6 pts) Redraw the graph from part (a) on the axes below. Then choose an event that would cause AD to shift to the left and show in a graph what happens in the Short run and then on the same graph how the economy adjusts in the Long Run (i.e. self corrects) if there is no government intervention.
- E.) (5 pts) List three specific policies (fiscal and monetary) that the government could use to help overcome a recession. Then choose one and explain with a graph.

B. Aggregate Results

Fall 2014

Econ 112 (4 unit course)			Econ 102 (3 unit course)	
Sections Offered	3		Sections Offered	3
Total Enrollment	121		Total Enrollment	196
Percent of Students with score >90%	41%		Percent of Students with score >90%	29%
Percent of Students with score >70%	71%		Percent of Students with score >70%	70%
Mean Score	82%		Mean Score	76%

Spring 2015

Econ 112 (4 unit course)			Econ 102 (3 unit course)	
Sections Offered	4		Sections Offered	3
Total Enrollment	133		Total Enrollment	168
Percent of Students with score >90%	44%		Percent of Students with score >90%	28%
Percent of Students with score >70%	65%		Percent of Students with score >70%	67%
Mean Score	80%		Mean Score	76%

Econ 312: INTERMEDIATE MACROECONOMICS

Professor Suparna Chakraborty

ASSESSMENT OF LEARNING OUTCOME

Program Learning Outcome assessed:

1. Understand economic terminology and the fundamental theoretical approaches of the discipline.

Specifics: Describe the interaction of demand and supply in a market for an economic good or service.

Matched Course Learning Outcome: Students will be able to mathematically derive relationship between economic variables embedded in demand and supply equations.

This learning outcome is tested against the first and last quizzes of the class. The first quiz, administered during the first three weeks serves as the benchmark. The last quiz is the final exam for the class.

Quiz 1 Question: Consider two competitive economies that have the same quantities of labor ($L = 400$) and capital ($K = 400$), and the same technology ($A = 100$). The economies of the countries are described by the following Cobb–Douglas production functions:

North Economy: $Y = A L^3 K^7$

South Economy: $Y = A L^7 K^3$

- A. Which economy has the larger total production? Explain. (2 points)
- B. In which economy is the real rental on capital larger? Explain. (3 points)

Assessment Result

	A	B	C	D
Raw Numbers	10	16	11	3
Percentage of total students	25%	40%	27.5%	7.5%

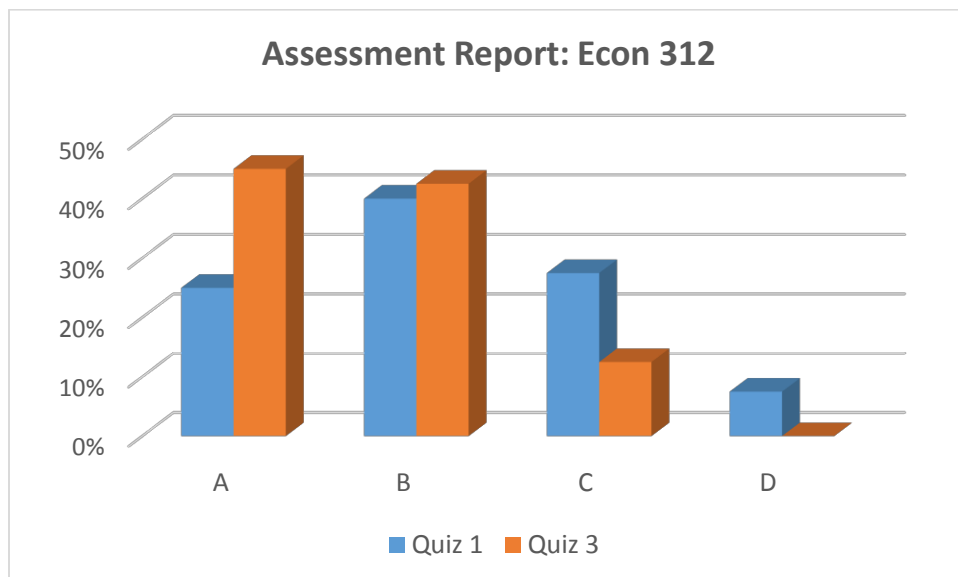
Quiz 3 Question:

Assume that a country's production function is $Y = AK^{0.3}L^{0.7}$. The ratio of capital to output is 3, the growth rate of output is 2 percent, and the depreciation rate is 6 percent. Capital is paid its marginal product.

- If the economy is in a steady state, what must be the saving rate? (2 points)
- What must the saving rate be to achieve the Golden Rule level of capital? (3 points)

Assessment Result

	A	B	C	D
Raw Numbers	18	17	5	0
Percentage of total students	45%	42.5%	12.5%	0.0%



GRADING RUBRIC ECON 312 2015 (Sunny Wong)

Suppose that the economy begins in the long-run equilibrium (point A). However, firms and households suddenly become more pessimistic about the future economic conditions and decide to reduce the level of investment and consumption, respectively.

Assessment Question 1: If there is no policy intervention from the government and the Fed, use an AD-AS diagram to explain the *short-run* and *long-run* effects in the economy.

Assessment Question 2: Now, instead of letting the economy adjust by itself, the government decides to restore the AD by increasing government spending. Assuming that the government successfully restores the AD back to the original position, use an AD-AS diagram to explain this situation.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
AQ1	16	7	2	0
AQ2	11	8	6	0