

## ECONOMICS UNDERGRADUATE MAJOR PROGRAM

### ASSESSMENT REPORT ACADEMIC YEAR 2017 – 2018

#### I. LOGISTICS & PROGRAM LEARNING OUTCOMES

1. Please indicate the name and email of the program contact person to whom feedback should be sent.

Elizabeth Katz, Economics Department Chair  
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2. Were any changes made to the program mission statement since the last assessment cycle in October 2017? Kindly state “Yes” or “No.” Please provide the current mission statement below.

Yes, the previous version has been pared down, based on previous feedback from FDCD.

Economics has developed a rigorous set of analytical and empirical tools for understanding human behavior as it plays out in everyday life, business, politics, and international issues. Our discipline has devoted itself to understanding how to better use society's scarce resources, how technology and markets have improved our standard of living, why unemployment, inequality, and poverty can exist in the midst of plenty, and many other pressing questions related to both domestic and international issues.

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 macroeconomic issues related to poverty, economic growth, and globalization.

- 3. Were any changes made to the program learning outcomes (PLOs) since the last assessment cycle in October 2017? Kindly state “Yes” or “No.” Please provide the current PLOs below.**

**Yes**

**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.

**4. Which particular Program Learning Outcome(s) did you assess for the academic year 2017-2018?**

**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.

## **II. METHODOLOGY**

### **5. Describe the methodology that you used to assess the PLO(s).**

Student performance on the final research paper in ECON 320 Introduction to Econometrics was used to assess the level of mastery of PLO 3.

The assignment asked each student to pose a relevant theoretical question, gather appropriate data, and test said theory using ordinary least squares regression, hypothesis testing, and other empirical techniques. See specific guidelines for the assignment attached.

A random sample of 20 (out of class of 35) papers were assessed by the instructor based on the attached rubric.

## **III. RESULTS & MAJOR FINDINGS**

### **6. What are the major takeaways from your assessment exercise?**

	(3) Exceeds Expectations	(2) Meets Expectations	(1) Below Expectations
Application of statistical (regression) analysis and inference	6 (30%)	10 (50%)	4 (20%)
Interpretation of statistical output	5 (25%)	12 (60%)	3 (15%)

We were pleased overall with the results: over 80% met or exceeded expectations.

This is the first year this PLO has been assessed using this particular student work product, so no trends are apparent.

#### **IV. CLOSING THE LOOP**

- 7. Based on your results, what changes/modifications are you planning in order to achieve the desired level of mastery in the assessed learning outcome? This section could also address more long-term planning that your department/program is considering and does not require that any changes need to be implemented in the next academic year itself.**

Although we are generally happy with the results, the department assessment committee has suggested two strategies we may employ to increase overall mastery of this particular PLO.

- 1. Introduce basic empirical research methods as curriculum in upper division electives. Giving students exposure to guided data gathering, analysis, and presentation tied to a specific research concepts, even prior to learning econometric tools, will better prepare them for this assignment in ECON 320.**
- 2. Use the same rubric to assess this PLO at the “Mastery” level in the empirical “Capstone” courses now required for all students. These courses (ECON 425 and 427) will further refine students’ skills in the area of empirical economics, and thus be good candidates for further assessment of this PLO.**
- 8. What were the most important suggestions/feedback from the FDCD on your last assessment report (for academic year 2016-2017, submitted in October 2017)? How did you incorporate or address the suggestion(s) in this report?**

The suggestion to revisit and edit our mission statement was very helpful. We will continue to refine the document to bring it into line with suggested standards and reflect the goals of the department.

## **ADDITIONAL MATERIALS**

**(Any rubrics used for assessment, relevant tables, charts and figures should be included here)**

	<b>(3) Exceeds Expectations</b>	<b>(2) Meets Expectations</b>	<b>(1) Below Expectations</b>
Application of statistical (regression) analysis and inference	Student demonstrates exceptional ability to formulate and estimate statistical models appropriate for a given research question. Is able to correctly apply advanced models.	Student demonstrates ability to formulate and estimate standard statistical models appropriate for a given research question.	Student is unable to correctly apply regression models to a research question.
Interpretation of statistical output	Student shows deep understanding of how regression and hypothesis testing statistics are calculated and interpreted. Is able to think critically about potential problems and mis-interpretations	Student shows adequate understanding of how regression and hypothesis testing statistics are calculated and interpreted.	Student is unable to correctly interpret basic statistical and hypothesis testing output.

## Guidelines for Research Project

1. Pick a topic that interests you and for which there is data and a testable hypothesis. I will provide several datasets which can be used as the basis for your project, but I encourage you to find your own.
2. You will need at least 4 variables with at least 50 observations each in your model (More is better in both cases).
3. Your final paper should include each of the following elements:
  - a. Introduction with a statement of your hypothesis and brief theoretical foundation.
  - b. An explanation of your data: sources, basic descriptive statistics, and any transformations.
  - c. Your proposed regression equation with clear economic interpretations for each coefficient, along with the expected signs.
  - d. Regression results that include the Stata output, summary of goodness of fit and statistical significance of your coefficients. Do the results match your expectations?
  - e. Results and explanations of test for serial correlation (Durbin-Watson).
  - f. Results and explanations of test for heteroskedasticity (White or Park).
  - g. Results and explanations of test for joint significance of two independent variables.
  - h. Comment on possible effects of multi-collinearity on your results.
  - i. Results and explanations of test for endogeneity of at least one independent variable.
  - j. Conclusion.