Expected Outcome 1: Analysis Using Economic Principles

Students graduating in Economics will be able to identify and apply accepted economic principles in the analysis of an empirical issue of social significance. This ability requires that the student recognize the particular relationships between measurable economic magnitudes as examples of very general economic laws. Hence, the student is asked to see the general relation within the specific application.

Assessment Method 1: Paper Evaluation from ECON 4600

Assessment Method Description
All economics majors are required to take ECON 4600 as a capstone class. This course is very difficult and, for many students, presents the greatest challenge of their academic careers. All students in this class prepare a scientific paper that requires them to (1) formulate a research problem; (2) identify and explain relevant economic literature; (3) propose an economic model of the phenomenon to be studied; (4) collect data useful for the analysis of the problem selected; (5) confront the model with the data using an appropriate statistical methodology; (6) perform hypothesis testing of the underlying economic relationships and perform model diagnostics.

All students present their papers both orally and in written submission before a panel of economics professors. Using 4 part rubric developed by a faculty committee, each paper is evaluated for the appropriateness of the topic addressed; the application of economic principles to the problem under study; the use of valid econometric techniques; and use of recommended computer software for hypothesis testing, model validation, and the creation of graphs to illustrate the findings.

Our evaluation of Expected Outcome 1, Analysis using economic principles, uses the second part of the rubric described above. By agreement, professors give marks corresponding to the scale: 1= 
incorrect; 2 = inadequate; 3 = adequate; 4 = good; 5 = excellent. Our standard for this component is a score of 3 or more. We are also interested in the number of students giving an excellent performance.

**Findings**
Faculty panels evaluated n=33 papers. Students typically spent from 4-10 weeks on their papers, often having several one-on-one meetings with faculty members to receive feedback prior to their submission. Faculty evaluations show very high consistency: there are no cases in which two or more faculty disagreed over a student score in this category of more than one point. The average score was 3.36, slightly lower than last year’s average of 3.58. On the other hand, we had only 3 scores below 3 this year, but had 6 previously. Perhaps this last result is more informative than an uncritical comparison of average scores.

- Data_2014

**How did you use findings for improvement?**
We have made continuous changes to the curriculum of ECON 4600, and we believe that our smaller number of poor scores reflects this. In particular, we place more emphasis on identifying model parameters with the corresponding economic effect. We are also employing a dedicated GTA to assist the students with all aspects of their project and paper.

**Additional Comments**

---

**Expected Outcome 2: Econometric Analysis**
Students should be able to formulate econometric models, collect data for their estimation, evaluate the results, and do so using recommended statistical packages available in our computer lab.

**Assessment Method 1:** Paper Evaluation from Econ 4600

**Assessment Method Description**
Faculty panel evaluation of the ECON 4600 papers is also used to evaluate the students’ econometric skills. These skills have several components: specification of a valid statistical model, collection and
organization of data, estimation by statistical software, and evaluation and interpretation of the results. Each piece is crucial, so they are assessed together.

Our faculty panel scores for rubric elements 3 (“The paper showed an understanding of basic econometric methods”) and 4 (“The paper displayed a reasonable command of important computer software, including office programs and statistical packages.”) Unlike outcome 1, however, here we require that the student show adequate (score 3 or more) performance on BOTH categories.

Findings
We had only one student who performed below our standard of adequacy: we consider this a strong vindication of the “hands-on” instruction we require of all students taking this class. Because students are required to display their progress (or lack thereof) several weeks prior to their submissions, we are able to address shortcomings directly.

- Data_2014

How did you use findings for improvement?
Although we had a single student who did not exhibit an adequate performance, we had 5 of 33 students who scored excellent ratings in both categories. We would like to increase the rate at which this happens, and we are discussing what classes could require some basic econometric assignments prior to ECON 4600 to assist students in earlier mastery of this material. We now are also debating requiring that all homework sets for our Mathematics for Economists class (ECON 3600) to be submitted using basic statistical software.

Additional Comments

Expected Outcome 3: Program Size
We expect to graduate a reasonable number of students each academic year in order to maintain a proper balance of quantity and quality in our program (including proper class size and course availability). Given our current level of resources, our goal is to graduate between 35 and 50 students from our undergraduate ECNL program per year.

Assessment Method 1: OIRA Graduation Data
Assessment Method Description
We use the publically available OIRA data on the number of students graduating from our academic program during the most recent year (including summers). The data is available on the web here:

https://oira.auburn.edu/factbook/acadinfo/degrees/degrees_awarded_by_College_major.aspx

Findings
The data indicates that we graduated 36 total students (9+21+6) from our ECNL undergraduate program during the Fall 2013, Spring 2014, and Summer 2014 semesters.

How did you use findings for improvement?
We met our current target, but we are on the lower side. If we dip below our target, then we will look at stepping up recruitment efforts in our principles level classes, as well as working with our new CLA admissions recruiter (Evan Thomas).

Additional Comments