# **Annual Progress Report**

# on Assessment of Student Learning for Undergraduate Programs (Rev 04/11)

The purpose of the Annual Progress Report (APR) of Student Learning Assessment is to provide a continuous improvement process through meaningful assessment of student. Results from assessment of student learning guide collective actions for curricular change, better learning opportunities for students, improvement of teaching, and more effective academic support services.

#### Introduction

Academic year: 2012-13

**Department/Program:** Economics **Degree program(s):** B.A. and B.S.

**Person(s) preparing report:** Daniel Kuester and Lloyd Thomas

Date submitted: October 13, 2011

## I. Student learning Outcomes

A) List all current SLOs for the Department/Program

Undergraduate majors in Economics will acquire knowledge in the following areas and demonstrate their mastery of:

- 1. Opportunity costs, the need to make choices because of scarcity; the fact that there is no such thing as a free lunch;
- 2. The use of models, formulas, graphs, algebra, etc., to describe economic phenomena and generate predictions;
- 3. Competitive markets as a means to efficient allocation and how the presence of externalities, market power, and imperfect information impede this process;
- 4. The distinction between real and nominal values, as well as costs, causes, and control of inflation:
- 5. Economic statistics (e.g., inflation, unemployment, GDP, economic growth, etc.);
- 6. Government involvement in the economy through taxes, transfer payments, provision of services, regulation, etc.;
- 7. The use of marginal analysis and the principle of diminishing returns;
- 8. The advantages of specialization and trade at both the personal and national levels;
- 9. The use of fiscal and monetary policy, deficits, interest rates, changes in the money supply, etc., to influence overall economic performance;
- 10. The determinants of economic growth;
- 11. The costs and causes of unemployment; public policies to ameliorate it;
- 12. The costs and causes of discrimination; public policies to ameliorate it.

B) Identify the link between departmental outcomes and the five K-State Undergraduate Outcome. (knowledge | critical thinking | communication | diversity | academic & professional integrity). If this information is available in a matrix, provide it or the link to the online site where the matrix is available.

http://www.k-state.edu/economics/pdfs/ugrad/slomatrix.pdf

C) Links to website where the Program SLOs, Assessment summary, and Alignment Matrix for the degree program are located (within two clicks of the Department/Program front page).

Available at http://www.k-state.edu/economics/undergrad/slo.html

- II. Assessment Strategies for each SLO that was assessed for this annual report. (please describe):
  - A) The measures used (at least one direct measure must be used for each student learning outcome).

We elected to evaluate four different outcomes this semester, outcomes three and nine were evaluated during the fall of 2012 and we evaluated outcomes seven, and eight during the spring of 2013. We frequently evaluate outcomes three and nine because of their tremendous importance to the discipline but we have not evaluated outcomes seven and eight in recent years.

All measures were direct during the assessment of economics majors. All seniors in the capstone course, ECON 580, Senior Seminar, during the fall semester of 2012 and the spring semester of 2013 were examined. At the start of the semester, students received a list of the 12 knowledge-based SLOs and the information that their final examinations would include questions closely based on two of the SLOs. ECON 580 typically has an enrollment of fifteen to thirty students. In the spring 2013 semester, nineteen took the final exam and in the fall of 2012 semester twenty students took the final.

We asked the following questions of our ECON 580 senior seminar students on their final during the fall of 2011.

1. Explain the sense in which economists believe that "market failure" occurs when production of certain goods involve negative externalities.

This was designed to evaluate objective three.

Objective three.;" Competitive markets as a means to efficient allocation and how the presence of externalities, market power, and imperfect information impede this process;

2. Using our AS/AD model with both axes correctly labeled, what will happen if we go over the "fiscal cliff" at the end of this year?

This was designed to evaluate objective nine.

"The use of fiscal and monetary policy, deficits, interest rates, changes in the money supply, etc., to influence overall economic performance;"

We asked the following questions of our ECON 580 senior seminar students during the spring of 2013.

## **Background**

- \* You can produce 300,000 cases
- \* You have customers for all your production.

## The new opportunity

\* Purchase 100,000 cases at \$16 a case and sell them to a new customer at \$18 a case.

## Question

\* Based on the facts you have, do you want to purse the new opportunity?

## **Additional Information**

#### Details regarding your customer base and production are shown below

Customer Customer base and	A	B	C
Volume (000's of cases)	100	100	100
Net Revenue per case	\$12	\$14.50	\$16
Machine	#1	#2	#3
Production (000's of cases)	100	100	100
Variable cash cost per case	\$8	\$13	\$14

## Simplifying assumptions

- \* Machines are collocated and their production is identical.
- \* Production is flexible and can be changed costlessly.
- \* No long term contracts
- \* No strategic importance to particular customers.

#### **QUESTION**

\* Based on all the facts, what do you recommend? What profit should you be able to earn?

The use of marginal analysis and the principle of diminishing returns; is used in this question designed to evaluate objective seven.

2. Suppose that two countries are considering trading with one another.

In Garrison Land each worker is capable of producing 200 bushels of wheat or 20 TV's in one day.

In Holton Land each worker is capable of producing 40 bushels of wheat or 10 TV's in one day.

Explain which country has absolute and comparative advantage in the production of each good.

Which economist that we covered in depth is best known for this type of an example/the advancement of this theory?

What would you suggest should happen in Garrison Land and Holton Land? Do you think it is likely that anyone would object to your recommendation?

This question was designed to evaluate objective eight.

B) Which and how many students were assessed and when.

Thirty nine students were evaluated at the completion of their ECON 580 course. Economics 580 is the only undergraduate course we offer that is restricted to only economics majors so we have elected to evaluate the students that take this class even though this limits our sample size. As we introduced a course for undergraduate majors at the sophomore level we are discussing evaluating their understanding of these objectives in that class as well. We have decided to evaluate students during both the fall and spring semesters to increase the available data that we have but we did not feel it was appropriate to ask these questions in classes where non majors represent the majority of students in the class. In the past we only evaluated these students who took senior seminar in the fall.

C) Minimum (and advanced if possible) levels for expected student achievement for each SLO A committee of two faculty members read the students' answers to the two questions and assigned scores based on judging each answer as "outstanding", "satisfactory" or "unsatisfactory". Overall, faculty scores were very consistent so it was decided to simply take the average of the two scores.

The committee then compared the number of (1) outstanding scores, (2) satisfactory scores, and (3) unsatisfactory scores to previous results. In order to be consistent with our scores from previous years the committee gave each outstanding score a score of 1.0, each satisfactory score a score of 2.0, and each unsatisfactory score a score of 3.0.

The department has previously established a benchmark of an average score below a 1.90 as the minimum level of expected student achievement on the average. Any student who scores an unsatisfactory score of a 3 on either question is not performing as well as we would like to see. Our department has determined that evaluating the average performance of all students is a strong indicator of how well our faculty are covering these objectives. We do not feel that a student necessarily is not capable of doing well with an economics major just because there is one specific objective where they do not meet standards. This is why we have decided to look at a more macro type view of how our students are performing.

If the average student score on an SLO is below a 1.50 we have determined that this is an outstanding score (again on our scale LOWER scores are considered to be better than higher scores).

#### III. Results for Each SLO Assessed

- A) What percentage of students demonstrate a minimum or higher level of competency? (if possible, what percentage of students achieved at an exceptional level?)
- B) What does this tell you about student learning?

For objective three six students scored "excellent" eight scored "satisfactory" and six students scored "unsatisfactory". This gave us an average score of 2.00 (33/22) which is not consistent with an excellent overall score (a score of 1.00 is "perfect" and an average score of 3.00 would be the worst score possible). This tells us that our graduating students do not have as good of a grasp of the concept of understanding externalities and how to show the effects of externalities in supply and demand markets. The faculty have been informed that our majors do not have as strong of an understanding of externalities as we would like to see a stronger understanding of these effects.

For objective nine eight students scored "excellent", ten students scored "satisfactory" and only two students scored "unsatisfactory". This gave us an average score of 1.6 which is something we consider to be an acceptable score. (a score of 1.00 is "perfect" and an average score of 3.00 would be the worst score possible) We are distributing this report to our faculty to inform them that not all of our students have a complete grasp of understanding objective nine which is about, the use of fiscal and monetary policy, deficits, interest rates, changes in the money supply, etc., to influence overall economic performance;

For objective seven, eleven students scored "excellent" seven scored "satisfactory" and one student scored "unsatisfactory". This gave us an average score of 1.47 (23/14) which is consistent with an excellent overall score (A score of 1.00 is "perfect" and an average score of 3.00 would be the worst score possible). This tells us that our graduating students have a very good grasp of the concept of understanding how to critically evaluate problems and having an ability to critically weigh costs and benefits of decisions.

The faculty have been informed that our majors have a very good understanding of understanding how to critically evaluate these types of issues and how to "think like an economist".

For objective eight ten students scored "excellent", six students scored "satisfactory" and three students scored "unsatisfactory". This gave us an average score of 1.63 which again is something we consider to be more than acceptable. (A score of 1.00 is "perfect" and an average score of 3.00 would be the worst score possible). This appears to be a very strong score overall and our students have a good grasp of gains from trade and comparative advantage.

We are distributing this report to our faculty to inform them that they are doing an excellent job of teaching critical thinking skills for our majors.

Well over half of our overall students surveyed had "excellent" answers to at least one of the two questions. About twenty students had "excellent" responses to both questions and another thirty seven percent of our students had "excellent" responses to one of the two questions.

## IV. Faculty Review of the Assessment Results

A) Describe the process by which program faculty reviewed the results and decided on the actions and/or revisions that were indicated by those results.

Faculty members and GTAs are being encouraged to provide activities and uphold standards which will help improve students' performances on these SLOs (as well as others on our list) in the years to come. Copies of our SLO's have been given out to all faculty and this report will be made available to all faculty and GTA's.

The faculty have had lengthy discussions about the relevance of each of our SLO's and it was determined that we do have an appropriate list of standards. This year's SLO report was emailed to faculty for added suggestions before it was finally submitted.

There have been a few points of contention off of previous reports. The evaluators did not understand that a low score is considered to be better than a high score even though that is clearly stated in the report. There was discussion about changing our standards and method of scoring but it was determined that we should more clearly state our measures in the report.

There was also concerns raised about the discussion of diversity (and the belief that there was a lack of this discussion) in the economics core curriculum. The faculty determined that this is something that is discussed in the core courses of 110, 520 and 580 in addition to many 500

and 600 electives so it was determined that we should add this information to our formal statement about SLO's and add the sentence that "These learning objectives are also covered in many classes that are 500 and 600 level electives."

## V. Revisions of Assessment Plan

A) What changes, if any, were implemented, based on the findings of the assessments?

It was determined that to better determine (and hopefully reflect) the exposure that our students are receiving about diverse opinions and cultures that we add a question to the exit interview that we conduct with our ECON 580 students where we ask them a question similar to.

"Do you feel that our economics courses have exposed you to a diverse set of views and beliefs about economic theories? If so is there one class that you would recommend to a student who wanted to learn about different points of view about economics.

Do you feel that you have a good understanding about how economic issues affect individuals from various cultures differently? Do you feel that you have been able to better understand normative views others may have about economics? Do you feel that you have an understanding of the causes and concerns about various types of discrimination? If so is there one class that you would recommend to a student who wanted to learn about these concerns?"

At this time we are not sure about how we can evaluate this on a numerical scale but we do plan on sharing these results with the faculty and we will determine if we need to change our approach about these issues from a departmental perspective.

We evaluated this survey for the first time in May of 2012 and the responses we received from our graduating seniors were overwhelmingly positive. We had similar results in May of 2013.

#### B) Revisions of your Assessment Plan or SLOs (if applicable)

There were concerns raised about the discussion of diversity (and the belief that there was a lack of this discussion) in the economics core curriculum. The faculty determined that this is something that is discussed in the core courses of 110, 520 and 580 in addition to many 500 and 600 electives so it was determined that we should add this information to our formal statement about SLO's (attached) and add the sentence that "These learning objectives are also covered in many classes that are 500 and 600 level electives."

Because of previous concerns raised it was determined that in the future we will evaluate the SLO's during each semester that ECON 580 is taught. We started doing this during the fall of 2011.

We changed our SLO objectives page slightly and that revised version of the SLO's is available at our website.

#### VI. Future Plans

A) Briefly describe the long-range plan to assess all of the outcomes if assessing over a sequence of years.

We believe that the survey approach will help us to determine a proper amount of feedback to objectively evaluate SLO #12. We plan to asses all of the other eleven objectives at least once over each eight semester period. This will enable us to evaluate all of our objectives while still requiring the students to prepare to understand each objective (they will not be able to know in advance which objective is being examined). There are certain objectives that we will continue to evaluate on a more regular basis.

# Kansas State University Department of Economics

Student Learning Outcomes – Bachelor of Science and Arts Degrees

CIP Code: 450601 Approved: December 1, 2003 Last updated: October, 2011

## Course Requirements:

All students graduating with either a B.S. or a B.A. degree in economics at Kansas State University must take 10 courses in the Department of Economics as a part of their graduation requirements; the 5 specified courses are referred to as the "core courses":

ECON 110	Principles of Macroeconomics
ECON 120	Principles of Microeconomics
ECON 510	Intermediate Macroeconomics
ECON 520	Intermediate Microeconomics
ECON 580	Senior Seminar in Economics

## Plus

5 economics courses at the 500, 600 or 700 levels

## Grading and Assessment

- a) Students must receive a grade of C or better in both 510 and 520.
- b) Students must receive a grade of C or better in all courses at the 500 level or higher or earn a GPA of 2.5 in all economics courses used to satisfy the degree requirement.
- c) Courses taken A/pass/F may not be used to meet these requirements.

Meeting these criteria is taken as *prima facie* evidence that students have satisfactorily demonstrated their proficiency in the 6 learning outcomes envisioned by the University. These learning objectives are also covered in many classes that are 500 and 600 level electives.

## Learning Outcome:

A. Knowledge	e
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Undergraduate majors in Economics will acquire knowledge in the following areas and demonstrate mastery of:

1. Opportunity costs; the need to make choices
because of scarcity; the fact that "there is
no such thing as a free lunch"

110, 120, 510, 520, 580

2. the use of models, formulas, graphs, algebra, etc., to describe economic phenomena and generate predictions

110, 120, 510, 520, 580

3. competitive markets as a means to efficient allocation and how the presence of externalities, market power and imperfect information impede this process

110, 120, 520

4. the distinction between real and nominal values, as well as costs, causes, and control of inflation

110, 120, 510, 520, 580

5. economic statistics (e.g., inflation, unemployment, GDP, economic growth, etc.)

110, 510, 580

6. government's involvement in the economy through taxes, transfer payments, provision of services, regulation, etc.

110, 120, 510, 520, 580

7. the use of marginal analysis and the principle of diminishing returns

110, 120, 510, 520, 580

8. the advantages of specialization and trade at both the personal and national levels

110, 120, 520

9. the use of fiscal and monetary policy – deficits, interest rates, changes in the money supply, etc, – to influence overall economic performance

110, 510, 580

10. the determinants of economic growth

110, 120, 510, 520, 580

11. the costs and causes of unemployment; public policies to ameliorate (correct, improve) it

110, 120, 510, 520, 580

12. the costs and causes of discrimination; public policies to ameliorate it.

110, 120, 520, 580

ECON DEPT: