

Course Assessment Report
Washtenaw Community College

| Discipline | Course Number | Title |
|--|--|---|
| Economics | 222 | ECO 222 08/06/2021- Principles of Economics II |
| College | Division | Department |
| Humanities, Social and Behavioral Sciences | Humanities, Social and Behavioral Sciences | Social Sciences |
| Faculty Preparer | | Gregg Heidebrink |
| Date of Last Filed Assessment Report | | |

I. Review previous assessment reports submitted for this course and provide the following information.

1. Was this course previously assessed and if so, when?

| |
|------------------------|
| Yes Winter 2006 |
|------------------------|

2. Briefly describe the results of previous assessment report(s).

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| Students improved their scores by 48% in a pretest/posttest assessment process. Students had slightly lower pre and posttest scores than the national norm, but a slightly higher percentage gain. |
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3. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

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| The assessment report noted that we would use the newest version of the TUCE for assessment in the future. These changes were not implemented as the TUCE is no longer extant and we were urged to move to embedded assessment. It also noted that the implementation of a C prerequisite in ECO 211 had already been implemented. |
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II. Assessment Results per Student Learning Outcome

Outcome 1: Manipulate supply and demand models to determine qualitative and quantitative changes in prices, output, allocative efficiency, and economic surplus that result from real-world events and government policy changes.

- Assessment Plan

- Assessment Tool: Departmentally-developed questions embedded in course exams
- Assessment Date: Winter 2022
- Course section(s)/other population: A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.
- Number students to be assessed: Approximately 40 - 60 students
- How the assessment will be scored: The assessment will be scored using a standardized key.
- Standard of success to be used for this assessment: Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is 70% or greater.
- Who will score and analyze the data: Full-time economics instructors will jointly score and analyze the data.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years below) | SP/SU (indicate years below) |
|-----------------------------|-------------------------------|------------------------------|
| | 2021 | |

2. Provide assessment sample size data in the table below.

| # of students enrolled | # of students assessed |
|------------------------|------------------------|
| 120 | 88 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

As the master syllabus indicated “A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.” In the end, we actually assessed four of the five sections offered. This sample reflected the range of timeslots, instructors, and modalities offered in Winter 2021. All students in each of the selected sections were assessed and all assessed students’ results were reported, provided they completed the assessment.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

Sections were chosen at random using a random number generator. The random sample did an excellent job of capturing the range of timeslots, instructors, and modalities offered in Winter 2021.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The outcome was assessed using four multiple-choice questions that were embedded in exams throughout the semester. It was scored using a test key.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: No

Of the 88 students being assessed, only 46 scored 70% or greater across the four multiple-choice questions. This translates into a 52.27% success rate. Clearly, students did not meet the standard of success across all sections. There was, however, wide variation in success rates across sections, with two sections meeting the 70% standard of success and two sections well-below the threshold. There was also substantial variation in success across the four questions used to assess this outcome. In retrospect one question may legitimately be subject to multiple interpretations and should be revised or replaced in any subsequent assessments.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

While student performance on Outcome 1 wasn't really characterized by strengths, students did relatively better translating real-world events into shifts of supply and demand curves and resultant changes in consumer and producer surplus.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Students continue to struggle with identifying the magnitude of a tax in supply and demand diagrams. The importance of teaching this basic skill needs to be emphasized to all economics instructors going forward.

Outcome 2: Identify the conditions that lead to market failure and evaluate potential corrective policies.

- Assessment Plan
 - Assessment Tool: Departmentally-developed questions embedded in course exams
 - Assessment Date: Winter 2022
 - Course section(s)/other population: A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.
 - Number students to be assessed: Approximately 40 - 60 students
 - How the assessment will be scored: The assessment will be scored using a standardized key.
 - Standard of success to be used for this assessment: Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is 70% or greater.
 - Who will score and analyze the data: Full-time economics instructors will jointly score and analyze the data.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years below) | SP/SU (indicate years below) |
|-----------------------------|-------------------------------|------------------------------|
| | 2021 | |

2. Provide assessment sample size data in the table below.

| # of students enrolled | # of students assessed |
|------------------------|------------------------|
| 120 | 88 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

As the master syllabus indicated “A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.” In the end, we actually assessed four of the five sections offered. This sample reflected the range of timeslots, instructors, and modalities offered in Winter 2021. All students in each of the selected sections

were assessed and all assessed students' results were reported, provided they completed the assessment.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

Sections were chosen at random using a random number generator. The random sample did an excellent job of capturing the range of timeslots, instructors, and modalities offered in Winter 2021.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The outcome was assessed using four multiple-choice questions that were embedded in exams throughout the semester. It was scored using a test key.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: No

Of the 88 students being assessed, 54 scored 70% or greater across the four multiple-choice questions. This translates into a 61.36% success rate. Students did not meet the standard of success across all sections, though the results for Outcome 2 were better than the results for Outcome 1. As with outcome 1, there was wide variation in success rates across sections. Two sections robustly met the standard of success with an 85.37% success rate and two sections were again well-below the threshold.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students as a whole were not successful in meeting the performance indicator for Outcome 2. However, that was largely due to their performance on one of the three questions assessing this outcome. Students generally did relatively well identifying instances of externalities and analyzing allocative efficiency on the other three questions.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Disappointingly, students across all sections seemed to have difficulty recognizing the characteristics of private goods. The importance of teaching this basic concept needs to be emphasized to all economics instructors going forward. The falloff in

scores on this question in some sections indicates that it may not be given due emphasis in those sections.

Outcome 3: Recognize cost concepts and manipulate cost curves to explain firm behavior.

- Assessment Plan
 - Assessment Tool: Departmentally-developed questions embedded in course exams
 - Assessment Date: Winter 2022
 - Course section(s)/other population: A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.
 - Number students to be assessed: Approximately 40 - 60 students
 - How the assessment will be scored: The assessment will be scored using a standardized key.
 - Standard of success to be used for this assessment: Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is 70% or greater.
 - Who will score and analyze the data: Full-time economics instructors will jointly score and analyze the data.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years below) | SP/SU (indicate years below) |
|-----------------------------|-------------------------------|------------------------------|
| | 2021 | |

2. Provide assessment sample size data in the table below.

| # of students enrolled | # of students assessed |
|------------------------|------------------------|
| 120 | 88 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

As the master syllabus indicated “A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.” In the end, we actually assessed four of the

five sections offered. This sample reflected the range of timeslots, instructors, and modalities offered in Winter 2021. All students in each of the selected sections were assessed and all assessed students' results were reported, provided they completed the assessment.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

Sections were chosen at random using a random number generator. The random sample did an excellent job of capturing the range of timeslots, instructors, and modalities offered in Winter 2021.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The outcome was assessed using four multiple-choice questions that were embedded in exams throughout the semester. It was scored using a test key.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: No

Of the 88 students being assessed, only 35 scored 70% or greater across the four multiple-choice questions. This translates into a 39.77% success rate. Outcome 3 had the lowest success rate of all the outcomes assessed. In some ways, this is not surprising. The material assessed by Outcome 3 is the most analytically complex material covered during the semester. Given the lowered math prerequisite and the removal of prerequisites entirely for students enrolled elsewhere, we have seen an influx of students with poor mathematical and analytical skills. Once again, there was wide variation in success rates across sections, though none of the sections individually met the standard of success.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

While students performed poorly in general on Outcome 3 questions, the highest average score on any assessment actually occurred while assessing Outcome 3. More than 92% of the students correctly identified the fixed cost component for a company.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Students seemed to have particular difficulty distinguishing between decreasing and negative marginal physical product and understanding the effects of changes in fixed cost. More emphasis needs to be placed on the distinction between negative and decreasing marginal measures across topics. New exercises will be added to the course to help students master this distinction.

Outcome 4: Recognize the ways in which firm behavior and efficiency are affected by differing market structures.

- Assessment Plan
 - Assessment Tool: Departmentally-developed questions embedded in course exams
 - Assessment Date: Winter 2022
 - Course section(s)/other population: A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.
 - Number students to be assessed: Approximately 40 - 60 students
 - How the assessment will be scored: The assessment will be scored using a standardized key.
 - Standard of success to be used for this assessment: Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is 70% or greater.
 - Who will score and analyze the data: Full-time economics instructors will jointly score and analyze the data.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years below) | SP/SU (indicate years below) |
|-----------------------------|-------------------------------|------------------------------|
| | 2021 | |

2. Provide assessment sample size data in the table below.

| # of students enrolled | # of students assessed |
|------------------------|------------------------|
| 120 | 88 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

As the master syllabus indicated “A stratified random sample of approximately 50% of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/evening, and full-time/part-time classes. All students in selected sections will be assessed.” In the end, we actually assessed four of the five sections offered. This sample reflected the range of timeslots, instructors, and modalities offered in Winter 2021. All students in each of the selected sections were assessed and all assessed students’ results were reported, provided they completed the assessment.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

Sections were chosen at random using a random number generator. The random sample did an excellent job of capturing the range of timeslots, instructors, and modalities offered in Winter 2021.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The outcome was assessed using four multiple-choice questions that were embedded in exams throughout the semester. It was scored using a test key.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

Of the 88 students being assessed, 63 scored 70% or greater across the four multiple-choice questions. This translates into a 71.59% success rate. Thus, students did actually meet the standard of success across all sections for Outcome 4. There was also less variation in success rates across sections and less variation in success across assessment questions.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

While students met the performance indicator for Outcome 4, they performed best when asked to demonstrate the effects of cartels on output, pricing, and efficiency. More than 84% of the students assessed correctly answered this question.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

The weakest performance on Outcome 4 occurred when students were asked to correlate advertising behavior with market structure. Only 68% of the students correctly answered this question. Performance on this question was uniform across sections. However, it is difficult to think of how to address this shortcoming at the moment. This will require consultation among the economics faculty.

III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

The most recent assessment dates from 2006. It noted that a course prerequisite had already been implemented. Anecdotally, this seemed to improve student performance. Aside from this, the only course change envisioned in the "Future Plans" section of that assessment report was a switch to an updated version of the Test of Understanding College Economics (TUCE). However, that instrument is no longer being updated, and we were urged to switch to embedded questions for assessment purposes. Thus, that plan is moot.

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

The course meets the needs of students in the sense that it provides them with the 3 credits they need for transfer credit. It also meets the needs of students who put in the time and do the work. They end up well-prepared for higher level courses. The assessment identified specific areas where students are having trouble mastering the material, but those were already apparent from a review of course exams. What the assessment does point out is that there is a significant difference in performance across sections. Some of this may be due to the fact that this assessment was conducted during the Winter 2021 semester. The lower-scoring sections were both virtual sections. Virtual pedagogy may still need some refinement.

3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

A summary of the results will be emailed to department faculty. Identified weaknesses will be discussed, and strategies for remedying weaknesses identified in this report will be implemented.

4. Intended Change(s)

| Intended Change | Description of the change | Rationale | Implementation Date |
|--|--|--|---------------------|
| Course Materials (e.g. textbooks, handouts, on-line ancillaries) | Add new exercises emphasizing the distinction between negative and decreasing marginal measures (OC#3). | This was an area of weakness in the current assessment; additional exercises will help students master this distinction. | 2021 |
| Other: Matters of emphasis and new exercises | While there are no changes to the structure, text, or master syllabus envisioned, we will make the changes discussed in the “analysis” section of each outcome. | Discussed in each outcome analysis. | 2021 |
| Other: discussion/consultation with instructors | Emphasize the importance of teaching identification of the magnitude of a tax in supply and demand diagrams (OC#1) as well as teaching the characteristics of private goods (OC#2); identify strategies for covering the correlation between advertising behavior and market structure (OC#4). | Students struggled with these topics across all sections. | 2021 |

5. Is there anything that you would like to mention that was not already captured?

No

III. Attached Files

Microeconomics Course Assessment Data

Faculty/Preparer: Gregg Heidebrink **Date:** 08/06/2021
Department Chair: Gregg Heidebrink **Date:** 08/06/2021
Dean: Scott Britten **Date:** 08/10/2021
Assessment Committee Chair: Shawn Deron **Date:** 12/13/2021

COURSE ASSESSMENT REPORT

Background Information

1. Course assessed:
Course Discipline Code and Number: ECO 222
Course Title: Principles of Economics II
Division/Department Codes: HSS/SOC

2. Semester assessment was conducted (check one):
 Fall 20__
 Winter 2006
 Spring/Summer 20__

3. Assessment tool(s) used: check all that apply.
 Portfolio
 Standardized test
 Other external certification/licensure exam (specify):
 Survey
 Prompt
 Departmental exam
 Capstone experience (specify):
 Other (specify):

4. Have these tools been used before?
 Yes
 No

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.
No

5. Indicate the number of students assessed/total number of students enrolled in the course.
14 students took both the pretest and the post-test.

6. Describe how students were selected for the assessment.
All students in even numbered sections were selected for testing.

Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment.
Students are now required to pass ECO 211 with a C or better to enroll in ECO 222.

2. State each outcome from the master syllabus that was assessed.
All outcomes were assessed.

3. Briefly describe assessment results based on data collected during the course assessment, demonstrating the extent to which students are achieving each of the learning outcomes listed above. Please attach a summary of the data collected.
87% of the students scored higher on the posttest than the pretest. Students improved their scores by 48% on average on the posttest.

4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success.
Comparison to nationally normed data indicates that our students had slightly lower average pretest and posttest scores, but achieved a slightly higher percentage gain.

5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

Please return completed form to the Office of Curriculum & Assessment, SC 247.

COURSE ASSESSMENT REPORT

Strengths: See 4

Weaknesses: See 4

Changes influenced by assessment results

1. If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses, along with a timeline for these actions. As noted above, students are now required to pass ECO 211 with a C or better to enroll in this class. This has already been implemented.

2. Identify any other intended changes that will be instituted based on results of this assessment activity (check all that apply). Please describe changes and give rationale for change.

[X] Master syllabus

Change/rationale: See answer to question 1 above.

[] Curriculum

Change/rationale:

[] Course syllabus

Change/rationale:

[] Course assignments

Change/rationale:

[X] Course materials (check all that apply)

[X] Textbook

[] Handouts

[] Other:

Change/rationale: A new text has been adopted. It features improved graphical examples and clearer explanations of some key concepts.

[] Instructional methods

Change/rationale:

[] Other:

Change/rationale:

Future plans

1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this course.

The TUCE does a reasonable job of assessing student achievement, however, some of the questions are dated.

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.

The TUCE is being updated by the publisher and will be issued in a new edition this year.

Submitted by:

Name:

[Handwritten signature]

Date:

6-27-06

Department Chair:

[Handwritten signature]

Date:

6-27-06

Dean:

[Handwritten signature]

Date:

JUN 27 2006

Please return completed form to the Office of Curriculum & Assessment, SC 247.