

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Economics	110	ECO 110 05/08/2019- Introduction to Economics
Division	Department	Faculty Preparer
Humanities, Social and Behavioral Sciences	Social Sciences	Douglas Langs
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?

No

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

3.

4. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

5.

II. Assessment Results per Student Learning Outcome

Outcome 1: The student will demonstrate a knowledge of the market process and the manner in which markets allocate resources.

- Assessment Plan
 - Assessment Tool: pre-post testing using TUCE3
 - Assessment Date: Fall 2007
 - Course section(s)/other population: all
 - Number students to be assessed: all
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:

- Who will 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)
	2019	

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

# of students enrolled	# of students assessed
32	22

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.

There were 32 students registered for this course. Out of 32 students, 22 students or 68%, of the students actually completed the assessment; ten students did not complete the assessment.

Part of the variance between the number of students assessed and the total number of students registered for the course was caused by absences and withdrawals. Additionally, part of the variance may have been caused by issuing the assessment as a separate non-graded exam near the end of the term. Students were not aware of the assessment until it was distributed in class, which may have contributed to the outcome results.

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.

There was only one face-to-face ECO 110 class offered during the Winter 2019 semester on WCC campus.

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

The old master syllabus specified the Test of Understanding College Economics (TUCE) as the assessment tool. As the TUCE is no longer published, it could not be used as an assessment tool. Instead, students were assessed using a separate 10-question multiple-choice quiz developed by the faculty. The questions on this quiz were chosen to correlate directly with the class outcomes. The tool was graded by the full-time faculty using a standardized key. In line with the updated master syllabus, the assessment process will move to embedded exams questions in future iterations.

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

Note 1: There are too few questions mapped to each outcome to use the “70% of the students will score 70% or better” metric to gauge success at the individual outcome level. This was the old master syllabus measure of success. Applying such a rule when you only have two or three questions for an outcome effectively requires a student to get all of them right to achieve “success”. So instead, we’ve focused on the “percent correct for each question”. Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome.

Outcome 1: The student will demonstrate a knowledge of the market process and the manner in which markets allocate resources.

Questions on Outcome 1 included: defining a free market, changes in supply and demand, and identifying the equilibrium price and quantity in a graph. Students did well at identifying the equilibrium, price and quantity, and determining surpluses and shortages from a supply and demand model.

Analysis

Two methods to evaluate the assessment results were used. The first method was based on the “percentage correct for each question”. The second method was based on total class results known as the “student equivalent” method.

Method 1 - Based on the Percentage Correct for "Each Question"

There were four (4) questions on the assessment associated with this outcome. The standard of success is now based on “the percent correct for each question”, which is as follows:

The results of the four questions assessed are as follows:

Question 1: 55% (Not Achieved)

Question 3: 41% (Not Achieved)

Question 8: 95% (Success Achieved)

Question 9: 77% (Success Achieved)

The average of all four questions was 67%. The standard of success was not achieved using this method.

Method 2 - Based on "Student Equivalent" Total Class Results

An alternative method of determining success is based the overall results for the class on a "student equivalent" basis (the total number of questions answered correctly divided by the number of students assessed). Unlike evaluating the results on a per question basis, the results for each question are aggregated based on all students answering all questions for each outcome. The "student equivalent" method was used to analyze the results two different ways.

1. Based on Registered Students (32 students)

Number of students answering these four (4) questions correctly: 59

Number of "Enrolled" students answering these four (4) questions: 128

Percentage of "Enrolled" students who answered these questions correctly: 46%

The standard of success was not achieved using this method.

2. Based on Students Actually Completing the Assessment (22 students)

Number of students answering these four (4) questions correctly: 59

Number of "Enrolled" students answering these four (4) questions: 88

Percentage of "Enrolled" students who answered these questions correctly: 67%

The standard of success was not achieved using this method.

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

Based on the number of students who actually completed the assessment on the day it was distributed (22 students), the success rate for Outcome 1 was 67%. Students generally did better at understanding the concepts of supply and demand. Students did well at identifying supply and demand curves and determining the equilibrium price and quantity in a graph. Students also demonstrated an understanding of the free market, which is also known as capitalism.

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.

When discussing supply and demand, there is a distinction between a "change in demand (supply)" and a "change in quantity demanded (supplied)". Because the terms appear to be similar, it can be difficult for students to understand the

difference between the two concepts. Students should be able to explain the difference between terms.

Outcome 2: The student will demonstrate a knowledge of the relationship between revenue, costs and output level in competitive and non competitive environments.

- Assessment Plan
 - Assessment Tool: pre-post testing using TUCE3
 - Assessment Date: Fall 2007
 - Course section(s)/other population: all
 - Number students to be assessed: all
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will 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)
	2019	

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

# of students enrolled	# of students assessed
32	22

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.

There were 32 students registered for this course. Out of 32 students, 22 students or 68%, of the students actually completed the assessment; ten students did not complete the assessment.

Part of the variance between the number of students assessed and the total number of students registered for the course was caused by absences and withdrawals. Additionally, part of the variance may have been caused by issuing the assessment as a separate non-graded exam near the end of the term. Students were not aware of the assessment until it was distributed in class, which may have contributed to the outcome results.

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.

There was only one face-to-face ECO 110 class offered during the Winter 2019 semester on WCC campus.

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

The old master syllabus specified the Test of Understanding College Economics (TUCE) as the assessment tool. As the TUCE is no longer published, it could not be used as an assessment tool. Instead, students were assessed using a separate 10-question multiple-choice quiz developed by the faculty. The questions on this quiz were chosen to correlate directly with the class outcomes. The tool was graded by the full-time faculty using a standardized key. In line with the updated master syllabus, the assessment process will move to embedded exams questions in future iterations.

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

Note 1: There are too few questions mapped to each outcome to use the “70% of the students will score 70% or better” metric to gauge success at the individual outcome level. This was the old master syllabus measure of success. Applying such a rule when you only have two or three questions for an outcome effectively requires a student to get all of them right to achieve “success”. So instead, we’ve focused on the “percent correct for each question”. Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome.

Outcome 2: The student will demonstrate a knowledge of the relationship between revenue, costs and output level in competitive and non competitive environments.

Questions on Outcome 2 included: understanding the characteristics of perfect competition, monopoly versus perfect competition, and determining the economic profit/loss.

Analysis

Two methods to evaluate the assessment results were used. The first method was based on the "percentage correct for each question". The second method was based on total class results known as the "student equivalent" method.

Method 1 - Based on the Percentage Correct for "Each Question"

There were three (3) questions on the assessment associated with this outcome. The standard of success is now based on "the percent correct for each question", which is as follows:

The results of the three questions assessed are as follows:

Question 5: 9% (Not Achieved)

Question 6: 50% (Not Achieved)

Question 7: 36% (Not Achieved)

The average of all three questions was 32%. The standard of success was not achieved using this method.

Method 2 - Based on Total Class Results - "Student Equivalent"

An alternative method of determining success is based the overall results for the class on a "student equivalent" basis (the total number of questions answered correctly divided by the number of students assessed). Unlike evaluating the results on a per question basis, the results for each question are aggregated based on all students answering all questions for each outcome. The "student equivalent" method was used to analyze the results two different ways.

1.) Based on Registered Students (32 students)

Number of students answering these three (3) questions correctly: 21

Number of "Enrolled" students answering these three (3) questions: 96

Percentage of "Enrolled" students who answered these questions correctly: 22%

The standard of success was not achieved using this method.

2.) Based on Students Actually Completing the Assessment (22 students)

Number of students answering these three (3) questions correctly: 21

Number of "Enrolled" students answering these three (3) questions: 66

Percentage of "Enrolled" students who answered these questions correctly: 32%

The standard of success was not achieved using this method.

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

Based on the number of students who actually completed the assessment on the day it was distributed (22 students), the success rate for Outcome 2 was 32%. Students generally did well in understanding the difference between market structures (perfect competition versus monopoly). Furthermore, given the three questions for this outcome, approximately 50% of the students knew the difference in pricing strategies between perfect competition and monopolies.

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.

Based on three questions, students generally did not do well interpreting and calculating mathematical questions involving revenue, costs and output levels. Students showed difficulty understanding and calculating profit maximization and loss minimization. It appears students may not have sufficient math skills for this course.

Outcome 3: The student will demonstrate a knowledge of the major macroeconomic variables and the manner in which they may be impacted by government policies.

- Assessment Plan
 - Assessment Tool: pre-post testing using TUCE3
 - Assessment Date: Fall 2007
 - Course section(s)/other population: all
 - Number students to be assessed: all
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will 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)
	2019	

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

# of students enrolled	# of students assessed
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32	22
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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.

There were 32 students registered for this course. Out of 32 students, 22 students or 68%, of the students actually completed the assessment; ten students did not complete the assessment.

Part of the variance between the number of students assessed and the total number of students registered for the course was caused by absences and withdrawals. Additionally, part of the variance may have been caused by issuing the assessment as a separate non-graded exam near the end of the term. Students were not aware of the assessment until it was distributed in class, which may have contributed to the outcome results.

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.

There was only one face-to-face ECO 110 class offered during the Winter 2019 semester on WCC campus.

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

The old master syllabus specified the Test of Understanding College Economics (TUCE) as the assessment tool. As the TUCE is no longer published, it could not be used as an assessment tool. Instead, students were assessed using a separate 10-question multiple-choice quiz developed by the faculty. The questions on this quiz were chosen to correlate directly with the class outcomes. The tool was graded by the full-time faculty using a standardized key. In line with the updated master syllabus, the assessment process will move to embedded exams questions in future iterations.

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

Note 1: There are too few questions mapped to each outcome to use the “70% of the students will score 70% or better” metric to gauge success at the individual outcome level. This was the old master syllabus measure of success. Applying such a rule when you only have two or three questions for an outcome effectively

requires a student to get all of them right to achieve “success”. So instead, we’ve focused on the "percent correct for each question". Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome.

Outcome 3: The student will demonstrate a knowledge of the major macroeconomic variables and the manner in which they may be impacted by government policies.

Questions on Outcome 3 included: Understanding how institutions are designed by government to encourage growth in the economy; government involvement in a changing economy; and understanding expansionary and contractionary fiscal policy.

Analysis

Two methods to evaluate the assessment results were used. The first method was based on the "percentage correct for each question". The second method was based on total class results known as the "student equivalent" method.

Method 1 - Based on the Percentage Correct for "Each Question"

There were three (3) questions on the assessment associated with this outcome. The standard of success is now based on the "percent correct for each question". The second method was based on the total class results known as the "student equivalent" method.

The results of the three questions assessed are as follows:

Question 2: 45% (Not Achieved)

Question 4: 45% (Not Achieved)

Question 10: 64% (Not Achieved)

The average of all three questions was 52%. The standard of success was not achieved using this method.

Method 2 - Based on "Student Equivalent" Total Class Results

An alternative method of determining success is based the overall results for the class on a "student equivalent" basis (the total number of questions answered correctly divided by the number of students assessed). Unlike evaluating the results per question, the results for each question are aggregated based on all

students answering all questions for each Outcome. The "student equivalent" method was used to analyze the results two different ways.

1.) Based on Registered Students (32 students)

Number of students answering these three (3) questions correctly: 34

Number of "Enrolled" students answering these three (3) questions: 96

Percentage of "Enrolled" students who answered these questions correctly: 35%

The standard of success was not achieved using this method.

2.) Based on Students Actually Completing the Assessment (22 students)

Number of students answering these three (3) questions correctly: 34

Number of "Assessed" students answering these four (4) questions: 66

Percentage of "Assessed" students who answered these questions correctly: 52%

The standard of success was not achieved using this method.

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

Based on the number of students who actually completed the assessment on the day it was distributed (22 students), the success rate for Outcome 3 was 52%. Given an economic model, known as the Aggregate Demand and Aggregate Supply model (AD-AS model), students had some success at identifying the appropriate level of government fiscal policy when the economy was not at full-employment.

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.

Over 50% of the students had difficulty understanding the different institutions in an economy (political, legal and economic systems). Students also had difficulty identifying the sequence of economic events required to achieve full employment. Since mathematics is involved in understanding changes in the AD-AS model, it is possible that either the students did not thoroughly understand the concept of the AD-AS model, or they simply had difficulty understanding the mathematics in order to solve these problems.

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.

This is the first assessment of this course ECO 110. A previous report was not available.

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 standard of success in this assessment, using various methodologies and based on 70% of the students achieving a score of 70% or higher, was not achieved in this course. Only 7 out of 22 students or 32% students successfully completed the assessment based on "student equivalent" results.

This course is designed for non-business majors who are interested in learning about economics. During the semester, most students perform relatively well. The course covers many concepts and theories which students comprehend. However, given the assessment results, long-term retention on specific concepts was not reflected in this assessment. Based on the overall results of these 10 multiple-choice questions, greater emphasis and time should be placed on fewer topics in order to improve the overall retention level in this course.

Additionally, economics requires a certain amount of mathematics. Some students display a weakness in this area. It is possible that students are not sufficiently prepared for the level of math required for this course.

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

The results of the assessment will be shared with department faculty once this assessment has been reviewed and approved. Reviewing and discussing the results with other faculty members could lead to new and better methods of achieving student success in the future.

4. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	In the original Master Syllabus for this course, the assessment tool was to be based on the TUCE (Test of	The original assessment was to be based on the TUCE (Test of Understanding of College	2022

	<p>Understanding of College Economics). However, the TUCE is no longer published. A new assessment tool was created consisting of 10 multiple-choice questions reflecting the three outcomes. Going forward, the 10 multiple-choice questions will be embedded into the semester exams. The Master Syllabus will be changed to reflect the new assessment tool.</p>	<p>Economics), which is no longer published.</p>	
Course Assignments	<p>The three outcomes identified in the ECO 110 assessment are appropriate goals for this Introduction to Economics course. However, it is recommended that more time be spent emphasizing the course objectives in order to improve student retention at the end of the semester.</p>	<p>This change is recommended based on the results which indicated only 32% of the students (based on student equivalent results) successfully passed the course assessment. Student retention of the material at the end of the semester was less than expected.</p>	2022
Course Assignments	<p>The pre-requisite for this course is "Academic Reading and Writing Levels of 6". However, the Master Syllabus does not require a</p>	<p>Students did not do well interpreting and calculating mathematical questions involving revenue, costs and output levels. Some</p>	2022

	mathematics pre-requisite. In order to assess the math level of students in the class, consideration should be given to assessing the students' level of mathematics in the beginning of the semester.	students had difficulty calculating profit maximization and loss minimization under different economic profit and loss conditions.	
Course Materials (e.g. textbooks, handouts, on-line ancillaries)	Additional emphasis on the distinction between a “change in demand (supply)” and a “change in quantity demanded (supplied)”.	Ensure students learn to distinguish between these two terms.	2022

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

6.

III. Attached Files

[Summary Data Results](#)

Faculty/Preparer: Douglas Langs **Date:** 08/20/2019
Department Chair: Gregg Heidebrink **Date:** 08/20/2019
Dean: Scott Britten **Date:** 09/24/2019
Assessment Committee Chair: Shawn Deron **Date:** 11/22/2019