Discipline	Course Number	Title
Economics	110	ECO 110 05/25/2023-Introduction to Economics
College	Division	Department
Humanities, Social and Behavioral Sciences	Humanities, Social and Behavioral Sciences	Social Sciences
Faculty Preparer		Douglas Langs
Date of Last Filed Assessment Report		02/24/2022

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

    This course was previously assessed in the Winter of 2022.

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

    The previous assessment had three outcomes. Students successfully achieved these outcomes if they scored an average of 70% or better on questions related to the outcomes. Based on the three outcomes on the previous assessment, students' average score was 79% on the first outcome, 54% on the second outcome, and 68% on the third outcome.

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

    1. Updated an assessment question to better reflect tools of monetary policy.

    2. All instructors are now using the same introduction to economics textbook.

    3. Instructors emphasized and spent more time on economic concepts "visually", with many different charts and graphs. The increase in visual examples and additional time improved student success in this course.

II. Assessment Results per Student Learning Outcome

Outcome 1: Identify the market process and the manner in which markets allocate resources.

- Assessment Plan

    - Assessment Tool: Outcome-related exam questions

    - Assessment Date: Fall 2024

    - Course section(s)/other population: All

    - Number students to be assessed: All

    - How the assessment will be scored: Answer key

    - Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher on each outcome related exam question.

    - Who will score and analyze the data: Department faculty

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)
	2023	

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

# of students enrolled	# of students assessed
42	35

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 42 students registered for this course at the beginning of the Winter 2023 semester. By the end of the semester, 35 students had completed all of the assessment questions. 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.

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.

Two sections were included in the assessment during the Winter of 2023. Both classes were face-to-face on campus, and taught by two different instructors.

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

One faculty member had questions embedded in their exams, while the other instructor gave their students a hardcopy exam. Students were given four questions regarding Outcome 1. Questions on Outcome 1 included: defining a free market, changes in supply and demand, and identifying the equilibrium price and quantity in a graph. Assessment questions were graded by full-time faculty using a standardized 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

Students successfully achieved this outcome if they scored 70% or better on questions related to this outcome. Given that students can only score 100% or 0% on questions, the standard of success should be updated to look at overall performance on outcome-related questions.

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

Analysis 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 based on "the percent correct for each question", which is as follows:
The results of the four questions assessed are as follows:
Question 1 (Free Market): 91% (Success Achieved)
Question 2 (Determine Equilibrium): 97% (Success Achieved)
Question 3 (Calculate a Shortage): 74% (Success Achieved)
Question 4 (Change in Demand): 51% (Not Achieved)

Analysis 2 - Based on the Overall Performance on all Questions
29/35 students (83%) scored 70% or higher on the outcome-related questions.

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

Student improvement was shown in two areas: "determining equilibrium" and "calculating a shortage".

	2023 Results	2021 Results	2019 Results
Question 1:	91%	91%	55%
Question 2:	97%	88%	95%
Question 3:	74%	61%	77%
Question 4:	51%	65%	41%

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.

	2023 Results	2021 Results	2019 Results
Question 1:	91%	91%	55%
Question 2:	97%	88%	95%
Question 3:	74%	61%	77%
Question 4:	51%	65%	41%

Student improvement was shown to decrease in one area: the concept of a "change in demand". Additional time and attention will be placed on this topic where the performance decreased from the prior assessment.

Outcome 2: Recognize the relationship between revenue, costs and output level in competitive and non-competitive environments.

- Assessment Plan

  - Assessment Tool: Outcome-related exam questions

  - Assessment Date: Fall 2024

  - Course section(s)/other population: All

  - Number students to be assessed: All

  - How the assessment will be scored: Answer key

  - Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher on each outcome related exam question.

  - Who will score and analyze the data: Department faculty

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)
	2023	

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

# of students enrolled	# of students assessed
42	35

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 42 students registered for this course at the beginning of the Winter 2023 semester. By the end of the semester, 35 students had completed all of the assessment questions. 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.

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.

Two sections were included in the assessment during the Winter of 2023. Both classes were face-to-face on campus, and taught by two different instructors.

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

One faculty member had questions embedded in their exams, while the other instructor gave their students a hardcopy exam. Students were given three questions regarding Outcome 2. Questions on Outcome 2 included: understanding the characteristics of perfect competition, monopoly versus perfect competition, and determining the economic profit/loss. Assessment questions were graded by full-time faculty using a standardized 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

Students successfully achieved this outcome if they scored 70% or better on questions related to this outcome. Given that students can only score 100% or 0% on questions, the standard of success should be updated to look at overall performance on outcome-related questions.

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

Analysis 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 based on "the percent correct for each question", which is as follows:

The results of the three questions assessed are as follows:
Question 5: (Individual Selling Fish) 51% (Not Achieved)

Question 6: (Perfect Competition.) 46% (Not Achieved)
Question 7: (Monopoly) 66% (Not Achieved)

Analysis 2 - Based on the Overall Performance on all Questions
10/35 students (29%) scored 70% or higher on the outcome-related questions. It may be helpful to add a fourth assessment question for this outcome.

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

Student improvement was shown to marginally increase in two areas. Students did better in understanding "perfect competition", as well as determining a "fisherman's profit or loss".

	2023 Results	2021 Results	2019 Results
Question 5:	51%	50%	36%
Question 6:	46%	43%	9%
Question 7:	66%	74%	50%

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.

Student improvement was shown to decrease in one area: the concept of a "monopolist". Additional time and attention will be placed on this topic where the performance decreased from the prior assessment.

	2023 Results	2021 Results	2019 Results
Question 5:	51%	50%	36%
Question 6:	46%	43%	9%
Question 7:	66%	74%	50%

Outcome 3: Identify the major macroeconomic variables and the manner in which they may be impacted by government policies.

- Assessment Plan

    o Assessment Tool: Outcome-related exam questions

    o Assessment Date: Fall 2024

    o Course section(s)/other population: All

    o Number students to be assessed: All

    o How the assessment will be scored: Answer key

- o Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher on each outcome related exam question.

- o Who will score and analyze the data: Department faculty

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)
	2023	

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

# of students enrolled	# of students assessed
42	35

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 42 students registered for this course at the beginning of the Winter 2023 semester. By the end of the semester, 35 students had completed all of the assessment questions. 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.

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.

Two Sections were included in the assessment during the Winter of 2023. Both classes were face-to-face on campus, and taught by two different instructors.

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

One faculty member had questions embedded in their exams, while the other instructor gave their students a hardcopy exam. Students were given three questions regarding Outcome 3. 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. Assessment questions were graded by full-time faculty using a standardized 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
Students successfully achieved this outcome if they scored 70% or better on questions related to this outcome. Given that students can only score 100% or 0% on questions, the standard of success should be updated to look at overall performance on outcome-related questions. 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. Analysis 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 based on "the percent correct for each question", which is as follows: The results of the three questions assessed are as follows: Question 8: (Fiscal Policy) 74% (Success Achieved) Question 9: (Monetary Policy) 71% (Success Achieved) Question 10: (AD/AS Model) 57% (Not Achieved) Analysis 2 - Based on the Overall Performance on all Questions 15/35 students (43%) scored 70% or higher on the outcome-related questions. It may be helpful to add a fourth assessment question for this outcome.

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

Students performed well on the question related to monetary policy, which was a new questions added based on the prior course assessment recommendation.

	2023 Results	2021 Results	2019 Results
Question 8:	74%	82%	64%
Question 9:	71%	N/A	N/A
Question 10:	57%	58%	45%

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.

Student improvement was shown to decrease in two areas: "Federal Policy" and a "Change in AD/AS". Additional emphasis will be placed on these topics where performance decreased from the prior assessment.

	2023 Results	2021 Results	2019 Results
Question 8:	74%	82%	64%
Question 9:	71%	N/A	N/A
Question 10:	57%	58%	45%

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.

Student success was achieved in 5 out of 10 assessment questions. Changes that were implemented had a positive impact on student success. From Section I above, the following intended change contributed to their success:
1. Course Assignments - more time was spent on course objectives.
Two changes that had a positive impact on student success were first, the selection of a new introduction to economics textbook for students not majoring in economics. Second, the instructor emphasized and spent more time on economic concepts "visually", with many different charts and graphs. The increase in visual examples and additional time improved student success in this course.

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?

This course is designed for non-business majors who are interested in learning about economics. The course covers many economic concepts and theories that were reflected in assessment questions. Based on the overall results, a majority of the students met the objectives and outcomes of the 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. Discussing the results with other faculty members may 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	It is suggested that a new question be added to both Outcomes 2 and 3. The total	Currently, Outcomes 2 and 3 only have three	2024

	number of questions on all three Assessment Outcomes would increase from 10 questions to 12 questions. The current standard of success is not applicable, as students cannot receive partial credit on each question. While item analysis should continue, the standard of success should be updated to: 70% of students will score 75% or higher on the outcome-related questions.	questions. Adding a fourth question to Outcomes 2 and Outcome 3 will allow students to miss one question and still achieve the goal of achieving a score of 75% or greater. Furthermore, an additional concept will be tested Outcomes 2 and Outcome 3.	
Course Materials (e.g. textbooks, handouts, on-line ancillaries)	The overall success rate of Outcome 2 was only 29%. Out of 35 students only 10 students answered all three questions correctly. Outcome 2 include specific questions regarding "Microeconomics". Additional emphasis will be placed on these microeconomic topics in order to improve student success.	Of the three Outcomes, Outcome 2 had the lowest overall student average score of 29%. The student overall average score for Outcome 1 was 83%, and the student overall average score for Outcome 3 was 43%.	2024

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

I would like to thank the Assessment Committee for their advice and support during the completion of this assessment. I would also like to personally thank Sera Bird who was very patient, very professional, and a pleasure to work with.

III. Attached Files

[ECO 110 Assessment Final Results 05-29-2023](#)

Faculty/Preparer: Douglas Langs   **Date:** 07/12/2023
Department Chair: Christopher Barrett **Date:** 07/13/2023
Dean: Victor Vega   **Date:** 07/18/2023
Assessment Committee Chair: Jessica Hale   **Date:** 11/28/2023

Discipline	Course Number	Title
Economics	110	ECO 110 11/03/2021-Introduction to Economics
College	Division	Department
Humanities, Social and Behavioral Sciences	Humanities, Social and Behavioral Sciences	Social Sciences
Faculty Preparer		Douglas Langs
Date of Last Filed Assessment Report		11/22/2019

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

   Yes, this course was previously assessed in the Winter of 2019.

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

   The previous assessment had three outcomes. Students successfully achieved these outcomes if they scored an average of 70% or better on questions related to the outcomes. Based on the three outcomes on the previous assessment, students' average score was 67% on the first outcome, 32% on the second outcome, and 52% on the third outcome.

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

   1. Assessment Tool – 10 multiple choice-questions were embedded into student exams.
   2. Course Assignments – more time was spent on course objectives.
   3. Course Assignment – because a mathematics prerequisite is not required for this course, consideration was given to assessing student math skills.
   4. Course Materials – emphasis was placed on the distinction between a "change in demand (supply)" and a "change in quantity demanded (supplied)".

II. Assessment Results per Student Learning Outcome

Outcome 1: Identify the market process and the manner in which markets allocate resources.

- Assessment Plan

  - Assessment Tool: Departmentally-developed exam

  - Assessment Date: Fall 2022

  - Course section(s)/other population: All

  - Number students to be assessed: All

  - How the assessment will be scored: Answer key

  - Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher.

  - Who will score and analyze the data: Department faculty

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)

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

# of students enrolled	# of students assessed
	33

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 44 students registered for this course at the beginning of the Fall 2021 semester. By the end of the semester, 33 students had completed all of the assessment questions. 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. (Fall 2021 was not available to select in Curricunet.)

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.

Two classes were included in the assessment during the Fall of 2021. One class was face-to-face on campus, and the other was a virtual class.

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

Students were assessed four (4) multiple-choice questions that were developed by the faculty and embedded in the student exams. The tool was graded by full-time faculty using a standardized 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

Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome. Questions were embedded in student exams.

Note: The current assessment process differs from the current assessment plan (standard of success, assessment tool). In the future, we will ensure that the assessment process is in line with the assessment plan.

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.

Analysis 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 based on "the percent correct for each question", which is as follows:

The results of the four questions assessed are as follows:

Question 1: 91% (Success Achieved)
Question 3: 65% (Not Achieved)
Question 8: 88% (Success Achieved)
Question 9: 61% (Not Achieved)

Analysis 2 - Based on the Percentage Average of all Questions

The average of all four questions was 76% (Success Achieved). The standard of success was achieved using this method of averaging all four assessments.

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

Student improvement was shown to increase in two areas: understanding free markets and the effects of a change in demand. Significant improvement was identified in two topics that were given additional time and attention.

	2021 Results	2019 Results
Question 1:	**91%**	**55%**
Question 3:	**65%**	**41%**
Question 8:	88%	95%
Question 9:	61%	77%

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.

Student improvement was shown to decrease in two areas: identifying equilibrium using a schedule and identifying a shortage. Additional emphasis will be placed on these two topics where performance decreased from the prior assessment.

	2021 Results	2019 Results
Question 1:	91%	55%
Question 3:	65%	41%
Question 8:	**88%**	**95%**
Question 9:	**61%**	**77%**

Outcome 2: Recognize the relationship between revenue, costs and output level in competitive and non-competitive environments.

- Assessment Plan

  o Assessment Tool: Departmentally-developed exam

  o Assessment Date: Fall 2022

  o Course section(s)/other population: All

  o Number students to be assessed: All

  o How the assessment will be scored: Answer key

  o Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher.

  o Who will score and analyze the data: Department faculty

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)

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

# of students enrolled	# of students assessed
	33

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 44 students registered for this course at the beginning of the Fall 2021 semester. By the end of the semester, 33 students had completed all of the assessment questions. 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. (Fall 2021 was not available to select in Curricunet.)

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.

Two classes were included in the assessment during the Fall of 2021. One class was face-to-face on campus, and the other was a virtual class.

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

Students were assessed three (3) multiple-choice questions that were developed by the faculty and embedded in the student exams. The tool was graded by full-time faculty using a standardized 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

Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome. Questions were embedded in student exams.

Note: The current assessment process differs from the current assessment plan (standard of success, assessment tool). In the future, we will ensure that the assessment process is in line with the assessment plan.

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

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

Analysis 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 based on "the percent correct for each question", which is as follows:

The results of the three questions assessed are as follows:

Question 5: 43% (Not Achieved)
Question 6: 74% (Success Achieved)
Question 7: 50% (Not Achieved)

Analysis 2 - Based on the Percentage Average of all Questions

The average of all four questions was 56% (Not Achieved). The standard of success was <u>not</u> achieved using this method of averaging all four assessments.

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

Student improvement was shown to increase in all three areas. Students did better in understanding the difference between market structures (perfect competition versus monopoly), as well as determining a firm's profit or loss. Significant improvement was identified in all three topics that were given additional time and attention.

	2021 Results	2019 Results
Question 5:	**43%**	**9%**
Question 6:	**74%**	**50%**
Question 7:	**50%**	**36%**

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.

Student improvement was shown to increase in all areas. We will continue emphasizing these topics in order to improve the success rates. 2021 Results 2019 Result Question 5: 43% 9% Question 6: 74% 50% Question 7: 50% 36%	

Outcome 3: Identify the major macroeconomic variables and the manner in which they may be impacted by government policies.

- Assessment Plan

    o Assessment Tool: Departmentally-developed exam

    o Assessment Date: Fall 2022

    o Course section(s)/other population: All

    o Number students to be assessed: All

    o How the assessment will be scored: Answer key

    o Standard of success to be used for this assessment: 70% of the students will achieve a score of 70% or higher.

    o Who will score and analyze the data: Department faculty

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)

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

# of students enrolled	# of students assessed
	33

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 44 students registered for this course at the beginning of the Fall 2021 semester. By the end of the semester, 33 students had completed all of the assessment questions. 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. (Fall 2021 was not available to select in Curricunet.)

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.

Two classes were included in the assessment during the Fall of 2021. One class was face-to-face on campus, and the other was a virtual class.

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

Students were assessed three (3) multiple-choice questions that were developed by the faculty and embedded in the student exams. The tool was graded by full-time faculty using a standardized 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

Students successfully achieved this outcome if they scored an average of 70% or better on questions related to this outcome. Questions were embedded in student exams.

Note: The current assessment process differs from the current assessment plan (standard of success, assessment tool). In the future, we will ensure that the assessment process is in line with the assessment plan.

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 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 based on "the percent correct for each question", which is as follows:

The results of the three questions assessed are as follows:

Question 2:   18% (Not Achieved)
Question 4:   58% (Not Achieved)
Question 10: 82% (Success Achieved)

Analysis 2 - Based on the Percentage Average of all Questions

The average of all three questions was 53% (Not Achieved). The standard of success was not achieved using this method of averaging all four assessments.

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

Student improvement was shown to increase in two areas. Given an economic model, known as the Aggregate Demand and Aggregate Supply model (AD-AS model), student success rates increased on two questions by identifying the appropriate level of government fiscal policy. Significant improvement was identified in two topics which were given additional time and attention.

	2021 Results	2019 Results
Question 2:	18%	45%
Question 4:	**58%**	**45%**
Question 10:	**82%**	**64%**

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.

Student improvement was shown to decrease in one area. Students had difficulty in identifying the Federal Reserve tools in order to change the money supply. Additional emphasis will be placed on this topic where performance decreased from the prior assessment.

	2021 Results	2019 Results
Question 2:	**18%**	**45%**
Question 4:	58%	45%
Question 10:	82%	64%

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.

> Student success was achieved in 4 out of 10 objectives. Changes that were implemented had a positive impact on student success. From Section I above, the following intended change contributed to their success:
>
> 1. Course Assignments - more time was spent on course objectives.
>
> Two changes that had a positive impact on student success were first, the selection of a new introduction to economics textbook for students not majoring in economics. Second, the instructor emphasized and spent more time on economic concepts "visually", with many different charts and graphs. The increase in visual examples and additional time improved student success in this course.

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?

> This course is designed for non-business majors who are interested in learning about economics. The course covers many economic concepts and theories that were reflected positively in the results of the assessment questions. Based on the overall results, a majority of the students met the objectives and outcomes of the 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. Discussing the results with other faculty members may 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	Update the language for the assessment tools to "Outcome-related exam questions".	This corresponds to the current assessment process.	2021

Course Materials (e.g. textbooks, handouts, on-line ancillaries)	As described in the Course Summary, two changes that had a positive impact on student success were first, the selection of a new introduction to economics textbook for students not majoring in economics. Second, the instructor emphasized and spent more time on economic concepts "visually", with many different charts and graphs. The increase in visual examples and additional time improved student success in this course. We will continue to do this moving forward.	Success rates based on the assessment questions showed an increase in 7 out of 10 objectives during the fall 2021 semester. The new textbook and emphasis on visual examples improved student performance.	2023

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

> I would like to thank the Assessment Committee for their advice and support during the completion of this assessment. I would also like to personally thank Sera Bird who was very patient, very professional, and a pleasure to work with.

III. Attached Files

Econ 110 Assessment Results - Fall 2021

Faculty/Preparer: Douglas Langs **Date:** 12/14/2021
Department Chair: Gregg Heidebrink **Date:** 12/15/2021
Dean: Scott Britten **Date:** 12/17/2021
Assessment Committee Chair: Shawn Deron **Date:** 02/23/2022

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: <u>No</u>

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.

<u>Analysis</u>

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.

<u>Method 1 - Based on the Percentage Correct for "Each Question"</u>

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 <u>not</u> 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 <u>not</u> 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 <u>not</u> 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
    - o Assessment Tool: pre-post testing using TUCE3
    - o Assessment Date: Fall 2007
    - o Course section(s)/other population: all
    - o Number students to be assessed: all
    - o How the assessment will be scored:
    - o Standard of success to be used for this assessment:
    - o 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: <u>No</u>
>
> **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.
>
> **<u>Analysis</u>**

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 <u>not</u> 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 <u>not</u> 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 <u>not</u> 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

    o Assessment Tool: pre-post testing using TUCE3

    o Assessment Date: Fall 2007

    o Course section(s)/other population: all

    o Number students to be assessed: all

    o How the assessment will be scored:

    o Standard of success to be used for this assessment:

    o 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 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.

<u>Method 1 - Based on the Percentage Correct for "Each Question"</u>

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 <u>not</u> achieved using this method.

<u>Method 2 - Based on "Student Equivalent" Total Class Results</u>

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 <u>not</u> 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 <u>not</u> 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

	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.	Economics), which is no longer published.	
Course Assignments	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.	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.	2022
Course Assignments	The pre-requisite for this course is "Academic Reading and Writing Levels of 6". However, the Master Syllabus does not require a	Students did not do well interpreting and calculating mathematical questions involving revenue, costs and output levels. Some	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