Course Assessment Report Washtenaw Community College

| Discipline | Course Number | Title |
| :--- | :--- | :--- |
| Economics | 211 | ECO 211 05/25/2023- <br> Principles of Economics I |
| 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
Yes. It was assessed in Fall 2016 and Winter 2019, though the assessment report was not finalized in 2019, apparently due to a glitch. This same glitch appeared when editing and attempting to submit the report this cycle, so the old report was deleted and a clean, new report was started.
2. Briefly describe the results of previous assessment report(s).

The Fall 2016 assessment used data from the Test of Understanding College Economics (TUCE, a standardized, nationally normed, and professionally vetted exam. The WCC student average exceeded the national sample average. That indicates that students who completed the course were, by and large, mastering the material. Individual analysis of test questions indicates that more emphasis could be given to fiscal and monetary policy.
3. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

Additional practice material was developed to help students work with examples of fiscal and monetary policy problems starting the following semester.

## II. Assessment Results per Student Learning Outcome

Outcome 1: Analyze problems facing individuals and society as a whole using the concepts of scarcity, efficiency, and opportunity cost.

- Assessment Plan
- Assessment Tool: Departmentally-developed questions embedded in course exams
- Assessment Date: Fall 2021
- Course section(s)/other population: A stratified random sample of approximately half 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 120-150 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2023 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 220 | 148 |

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.

Course assessment took place in eight of the nine sections of ECO 211 that we offered in Winter 2023. One section was excluded due to my oversight. All students in each assessed section were assessed and included in the sample unless they dropped, withdrew, or otherwise failed to take an exam and thus answer the assessment questions.
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.

Selected sections were taught by part-time and full-time faculty. They included morning, afternoon, and evening offerings. Face-to-face, virtual, and asynchronous modalities were all robustly represented.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Students were assessed using a set of 12 multiple choice quiz questions developed by the faculty. These were embedded by faculty members in their exams throughout the semester. The questions were chosen to correlate directly with the four course outcomes. Each outcome was assessed by three questions. The tool was scored 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

The ECO 211 Master Syllabus (Effective Spring /Summer 2020) states that "Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is $70 \%$ or greater." This is probably not the best metric for determining success as it does not measure how many individual students successfully met the outcome. However, it is the metric in the approved syllabus, so it is what we will use below.

The average percent correct on the questions related to Outcome 1 was 56.53 percent. Thus, students did not meet the $70 \%$ metric. Significant variance existed across sections, with some sections averaging as high as 72.22 percent and others averaging as low as 34.85 percent on the three questions. Significant variance also existed in terms of average scores across the three questions, with students scoring an average of 75.68 percent on question 1 and 44.59 percent on question 2 .
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students scored an average of 75.68 percent on the first question. Therefore, they seem to have a reasonable understanding of how real-world events would lead to shifts in the PPF. Students scored an average of 44.59 percent and 49.32 percent respectively on questions 2 and 3 for Outcome 1. This indicates a poor understanding for many students of how specialization of inputs (or the lack thereof) affects opportunity cost, and how an economy's current mix of capital and consumption good production affects future growth.
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.

Additional emphasis will be given to the role of capital goods in economic growth and the effects of specialization of inputs on opportunity cost.

Outcome 2: Determine changes in equilibrium price and quantity, as well as the effects of market interventions, using the supply and demand framework.

- Assessment Plan
- Assessment Tool: Departmentally-developed questions embedded in course exams
- Assessment Date: Fall 2021
- Course section(s)/other population: A stratified random sample of approximately half of the sections offered that semester will be selected. The sample will reflect on-campus/DL, day/and evening, and full-time/part-time classes. All students in selected sections will be assessed.
- Number students to be assessed: Approximately 120-150 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 faculty 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2023 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 220 | 148 |

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.

Course assessment took place in eight of the nine sections of ECO 211 that we offered in Winter 2023. One section was excluded due to my oversight. All students in each assessed section were assessed and included in the sample unless they dropped, withdrew, or otherwise failed to take an exam and thus answer the assessment questions.
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.

Selected sections were taught by part-time and full-time faculty. They included morning, afternoon, and evening offerings. Face-to-face, virtual, and asynchronous modalities were all robustly represented.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Students were assessed using a set of 12 multiple choice quiz questions developed by the faculty. These were embedded by faculty members in their exams throughout the semester. The questions were chosen to correlate directly with the four course outcomes. Each outcome was assessed by three questions. The tool was scored 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

The ECO 211 Master Syllabus (Effective Spring /Summer 2020) states that "Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is $70 \%$ or greater." This is probably not the best metric for determining success as it does not measure how many individual students successfully met the outcome. However, it is the metric in the approved syllabus, so it is what we will use below.

The average percent correct on the questions related to Outcome 2 was 53.38 percent. Thus, students did not meet the $70 \%$ metric. Significant variance existed across sections, with some sections averaging as high as 72.22 percent and others averaging as low as 31.82 percent on the three questions. Results were, however,
more consistent across questions, with students scoring an average of 53.38 percent, 48.65 percent, and 58.11 percent on questions 1, 2, and 3 for Outcome 2.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Within certain sections, scores on these questions, which test student knowledge of supply, demand, and market intervention, were quite strong. Some sections had students averaging 83.33 or even 93.75 percent on some of the questions. These students clearly have mastered the material.
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.

In some sections, students scored significantly lower on questions associated with Outcome 2. More emphasis needs to be given to understanding when a price floor or ceiling is binding in these sections, and which groups benefit and lose when price ceilings and floors are enacted. More practice problems and homework on these topics are likely warranted.

Outcome 3: Interpret and calculate measures of employment, inflation, and output.

- Assessment Plan
- Assessment Tool: Departmentally-developed questions embedded in course exams
- Assessment Date: Fall 2021
- Course section(s)/other population: A stratified random sample of approximately half 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 120-150 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 faculty 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2023 |  |

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

| $\#$ of students enrolled | \# of students assessed |
| :--- | :--- |
| 220 | 148 |

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.

Course assessment took place in eight of the nine sections of ECO 211 that we offered in Winter 2023. One section was excluded due to my oversight. All students in each assessed section were assessed and included in the sample unless they dropped, withdrew, or otherwise failed to take an exam and thus answer the assessment questions.
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.

Selected sections were taught by part-time and full-time faculty. They included morning, afternoon, and evening offerings. Face-to-face, virtual, and asynchronous modalities were all robustly represented.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Students were assessed using a set of 12 multiple choice quiz questions developed by the faculty. These were embedded by faculty members in their exams throughout the semester. The questions were chosen to correlate directly with the four course outcomes. Each outcome was assessed by three questions. The tool was scored 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
The ECO 211 Master Syllabus (Effective Spring /Summer 2020) states that "Students will have successfully met a specific outcome if the average percent
correct on the questions related to that outcome is $70 \%$ or greater." This is probably not the best metric for determining success as it does not measure how many individual students successfully met the outcome. However, it is the metric in the approved syllabus, so it is what we will use below.

The average percent correct on the questions related to Outcome 3 was 52.70 percent. Thus, students did not meet the $70 \%$ metric. Significant variance existed across sections, with some sections averaging as high as 66.67 percent and others averaging as low as 44.44 percent on the three questions. Some variation existed across questions, with students scoring an average of 52.03 percent, 42.57 percent, and 63.51 percent on questions 1,2 , and 3 for Outcome 3.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Several sections scored very highly on questions asking them to calculate unemployment rates and interpret disinflation. Their average percent correct solidly exceeded 70 percent. These sections clearly mastered those topics.
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.

In most sections, students struggled to calculate the real rate of interest. There were sporadic difficulties across sections interpreting the concept of disinflation. Both of these areas will require additional emphasis. Additional homework on these topics is likely warranted.

Outcome 4: Determine changes in unemployment, output, inflation, interest rates, and exchange rates using the AS/AD and financial market models.

- Assessment Plan
- Assessment Tool: Departmentally-developed questions embedded in course exams.
- Assessment Date: Fall 2021
- Course section(s)/other population: A stratified random sample of approximately half 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: All students in the selected sections will be assessed.
- 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 faculty 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2023 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 220 | 148 |

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.

Course assessment took place in eight of the nine sections of ECO 211 that we offered in Winter 2023. One section was excluded due to my oversight. All students in each assessed section were assessed and included in the sample unless they dropped, withdrew, or otherwise failed to take an exam and thus answer the assessment questions.
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.

Selected sections were taught by part-time and full-time faculty. They included morning, afternoon, and evening offerings. Face-to-face, virtual, and asynchronous modalities were all robustly represented.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Students were assessed using a set of 12 multiple choice quiz questions developed by the faculty. These were embedded by faculty members in their exams throughout the semester. The questions were chosen to correlate directly with the four course outcomes. Each outcome was assessed by three questions. The tool was scored 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

The ECO 211 Master Syllabus (Effective Spring /Summer 2020) states that "Students will have successfully met a specific outcome if the average percent correct on the questions related to that outcome is $70 \%$ or greater." This is probably not the best metric for determining success as it does not measure how many individual students successfully met the outcome. However, it is the metric in the approved syllabus, so it is what we will use below.

The average percent correct on the questions related to Outcome 4 was 63.29 percent. So, although students scored higher on this outcome than any other, they once again did not meet the $70 \%$ metric. Less variation existed across sections for this outcome, with all but one section averaging between 61.11 percent and 69.70 percent across the three questions. There was also much less variation across the questions in this outcome, with students scoring an average of 61.49 percent, 63.51 percent, and 64.86 percent on questions 1,2 , and 3 for Outcome 4.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

It is a bit odd that students performed relatively better on the material for Outcome 4 as this is in some sense the capstone section of the course. This may be explained by the fact that a full semester's exposure to the material gradually sharpens a student's ability to "think like an economist". While not wildly successful, students consistently showed a better grasp of fiscal and monetary policy and the effects of real-world events on the economy than they did earlier material. Individual section scores often exceeded 70 percent on at least some of the 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.

Students were weakest in this area when identifying monetary policies with similar effects on the economy. That, however, will not warrant additional emphasis or exercise as the Fed has fundamentally changed the way it conducts monetary policy of late and this section of the course will need to be significantly reworked.

## 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.

Since the assessment methodology changed so drastically, it is essentially impossible to say how effective the planned changes from 2016 were. That said, student performance on the topics of fiscal and monetary policy was stronger than in it was in most other areas.
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 fulfills the needs of the students in the sense that it covers all the material one would expect in a standard Principles of Macro course. Whether all sections provide students with sufficient practice they need to master those concepts is harder to answer. Different instructors employ homework in different ways and to different degrees. Some of the variability in performance between sections may be a result of those differences in homework. Equally though, that variability in performance may be due to selection bias associated with different course formats and instructors, or differences in rigor and retention across sections. The assessment tool cannot answer this question. Perhaps one commonality of weakness across the questions that caused students problems is that those questions involved math in some way shape or form.
3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

The results will be shared as an email with discipline faculty and the department chair.
4.

Intended Change(s)

| Intended Change | Description of the <br> change | Rationale | Implementation <br> Date |
| :--- | :--- | :--- | :--- |
|  | Faculty will be <br> encouraged to add <br> additional <br> homework/practice | Some of the <br> variation in <br> performance across <br> sections may, in |  |
| Course Materials <br> (e.g. textbooks, <br> handouts, on-line <br> ancillaries) | activities to help <br> students cement <br> their knowledge of be due to <br> enowics concepts <br> economer practice <br> and build their skills | 2023 |  |
| exercises and less |  |  |  |
| homections. |  |  |  |$\quad$.


|  | applying those concepts. |  |  |
| :---: | :---: | :---: | :---: |
| Other: Standard of Success | The standard of success will change to "Students will have successfully met a specific outcome if $60 \%$ of the students successfully answer $66.66 \%$ percent of the questions related to that outcome. | No obvious, objective standard of success exists. However, this change accomplishes several goals. First, it parallels the standard of success used when assessing general education. Success will now be based on whether each individual student succeeds across all questions on outcome rather than average class performance on individual questions. Second, it recognizes that there are 3 questions for any outcome. Thus, answering 2 or more of them constitutes success for an individual student. Third, it more closely matches the bar for passing in most economics course, where $60 \%$ will earn you a passing grade. | 2023 |

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

No

## III. Attached Files

ECO 211 Course Assessment Data - W23
ECO 211 Course Assessment Tool
Faculty/Preparer: Gregg Heidebrink Date: 05/25/2023
Department Chair: Christopher Barrett Date: 05/27/2023
Dean: Scott Britten Date: 05/30/2023
Assessment Committee Chair: Jessica Hale Date: 10/13/2023

| Discipline | Course Number | Title |
| :--- | :--- | :--- |
| Economics | 211 | ECO 211 08/11/2016- <br> Principles of Economics I |
| Division | Department | Faculty Preparer |
| Humanities, Social and <br> Behavioral Sciences | Social Science | Gregg Heidebrink |
| Date of Last Filed Assessment Report |  |  |

## I. Assessment Results per Student Learning Outcome

Outcome 1: Apply the concepts of scarcity, opportunity cost, and comparative advantage.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
o Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4. Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC's average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students who successfully completed the course showed, on average, a reasonable understanding of this material.
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.

Given that students clearly exceeded the standard for success, there are no plans to change the coverage or instruction of this material. Consideration will be given to ways in which a larger proportion of the students that start the class can be encouraged to complete the class.

Outcome 2: Apply the basic principles of supply and demand analysis.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
o Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4.
Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC's average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students who successfully completed the course showed, on average, a reasonable understanding of this material.
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.

Given that students clearly exceeded the standard for success, there are no plans to change the coverage or instruction of this material. Consideration will be given to ways in which a larger proportion of the students that start the class can be encouraged to complete the class.

Outcome 3: Recognize the role of government in a capitalist economy.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
o Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4.
Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC's average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students who successfully completed the course showed, on average, a reasonable understanding of this material.
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.

Given that students clearly exceeded the standard for success, there are no plans to change the coverage or instruction of this material. Consideration will be given to ways in which a larger proportion of the students that start the class can be encouraged to complete the class.

Outcome 4: Describe the measurement and determination of employment, inflation, and output.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
o Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4. Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC's average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students who successfully completed the course showed, on average, a reasonable understanding of this material.
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.

Given that students clearly exceeded the standard for success, there are no plans to change the coverage or instruction of this material. Consideration will be given to ways in which a larger proportion of the students that start the class can be encouraged to complete the class.

Outcome 5: Demonstrate how money is created in a fractional reserve system and describe money's role in a modern economy.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
o Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4.
Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national
sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC’s average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students who successfully completed the course showed, on average, a reasonable understanding of this material. Review of scores on questions indicates that student understanding of this material is somewhat weaker than the material related to earlier outcomes.
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.

Given that students exceeded the standard for success, there are no plans for significant changes the coverage or instruction of this material. Some additional practice exercises or simulations may be incorporated as time permits.

Outcome 6: Differentiate the mechanisms of fiscal and monetary policy and their effectiveness.

- Assessment Plan
o Assessment Tool: TUCE3 standardized exam
o Assessment Date: Fall 2013
- Course section(s)/other population: Rotating odd-even sections
o Number students to be assessed: All students in selected sections
o How the assessment will be scored: Answer Key
o Standard of success to be used for this assessment: The TUCE is nationally normed. More than $50 \%$ of the students should score above the national average performance.
o 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 <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
|  | 2015 |  |

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

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 255 | 68 |

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.

All students who completed the class were required to take the TUCE4.
Completing the class was defined as taking the Final Exam. Of the 72 students who took the Final Exam, 4 failed to take the TUCE4.
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.

Students were selected from on campus daytime sections. It would be worthwhile to include evening class on campus sections going forward. Currently, there is no mechanism available for assessing off campus and DL sections using this tool.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Master Syllabus for ECO 211, Principles of Economics I, was developed by Randy LaHote in 2011. It specified that the Test of Understanding College Economics-Fourth Edition (TUCE4) be used as the assessment tool for this course. The TUCE4 is a nationally normed standardized exam given to students at
two and four year institutions across the country. It was developed by the National Council on Economic Education NCEE and has two main objectives. It is designed "to offer a reliable and valid assessment instrument for students in principles of economics courses" and "to provide norming data for a large national sample of students in principles exams". There are separate exams for macro and microeconomics courses. Each has 30 questions.

The TUCE4 was administered to 4 sections (approximately half) of ECO 211 students at the end of the semester. It was machine scored based on a NCEE provided 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

Learning outcome success per the Master Syllabus is demonstrated by having more than $50 \%$ of the class score higher than the national average on the TUCE4 Macro Exam.

The average score for the national cohort was 14.06 with a standard deviation of 5.28. Therefore, WCC's average of 19.7 exceeded the national average by a full standard deviation. On an individual level, 59 of the 68 WCC students who took the TUCE4 Macro scored higher than the national average. The standard of success was met.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

A review of student performance on individual questions indicated that students had more difficulty with questions related to this outcome. This is not unexpected. Answering these questions correctly requires the highest level of mastery of the material as well as the strongest analytical skills.
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.

Within the time constraints of the course, some additional emphasis will be given to covering material related to fiscal and monetary policy, which are frequently squeezed in at the end of the semester.

## II. Course Summary and Action Plans Based on Assessment Results

1. 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 WCC student average exceeded the national sample average by more than a standard deviation. That indicates that students who are completing the course are doing well. Individual analysis of some test questions indicates that more emphasis could be given to fiscal and monetary policy.
2. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

The results of this assessment will be shared with the Social Science Department generally in departmental meetings More detailed results will be provided to the Economics Faculty via email and through discussions.
3.

Intended Change(s)

| Intended Change | Description of the <br> change | Rationale | Implementation <br> Date |
| :--- | :--- | :--- | :--- |

No changes intended.
4. Is there anything that you would like to mention that was not already captured?

## 5.

## III. Attached Files

TUCE4 Macro Results W15
TUCE\$ Macro Sample Questions W15
Faculty/Preparer: Gregg Heidebrink Date: 08/11/2016
Department Chair: Gregg Heidebrink Date: 08/11/2016
Dean: Kristin Good Date: 08/25/2016
Assessment Committee Chair: Michelle Garey Date: 10/25/2016

## COURSE Assessment Report

## I. Background Information

1. Course assessed:

Course Discipline Code and Number: ECO 211
Course Title: Principles of Economics I
Division/Department Codes: Social Science
2. Semester assessment was conducted (check one):
$\square$ Fall 20
区 Winter 2010
$\square$ Spring/Summer 20
3. Assessment tool(s) used: check all that apply.
$\square$ Portfolio
区 Standardized test
$\square$ Other external certification/licensure exam (specify):SurveyPromptDepartmental exam
Capstone experience (specify):Other (specify):
4. Have these tools been used before?
$\triangle \mathrm{Ye}$
No

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.

- Yes. The TUCE 4 used this year is an updated version of the TUCE 3.

5. Indicate the number of students assessed/total number of students enrolled in the course.

- 49

6. Describe how students were selected for the assessment.

- All students in the 3 sections who completed the course were assessed.

11. Results
12. Briefly describe the changes that were implemented in the course as a result of the previous assessment.

- "Policy Matters" were given additional emphasis.

2. List each outcome that was assessed for this report exactly as it is stated on the course master syllabus.

- The student will apply the concepts of scarcity, opportunity cost, and comparative advantage.
- The student will manipulate supply and demand diagrams to identify the changes in price and quantity resulting from changes in market conditions.
- The student will identify the roles that governments fulfill in a capitalist economy.
- The student will calculate measures of unemployment, inflation, and output.
- The student will demonstrate both an understanding of how money is created in a fractional reserve system and an understanding of money's role in a modern economy.
- The student will identify components of fiscal and monetary policy and views of their effectiveness by various schools of economic thought.


## Course Assessment Report

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.

- During the Winter 2010 semester, student learning in 3 sections of ECO 211 was evaluated using the TUCE 4 in accordance with the assessment plan specified by the approved Course Master Syllabus. The syllabus specified that "an above average performance by $50 \%$ of the students will indicate success." Of the 49 students who took the TUCE 4 as a posttest, 33 students ( $67 \%$ of those tested) scored higher than the national average. Furthermore, while the nationally normed average on the TUCE 4 upon completion of macroeconomics is 14.19 , students in these three sections averaged 18.37. All data is attached.

4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success. Please attach the rubric/scoring guide used for the assessment.

- Please see the answer to question 3 above.

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

Strengths: The student assessment process indicates that students are exceeding the expectations.
Weaknesses: The student assessment process failed to identify any student weaknesses.
III. 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.

- No weaknesses were identified.

2. Identify 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.
a. $\square$ $\square$ Outcomes/Assessments on the Master Syllabus Change/rationale:
b.
$\square$ Objectives/Evaluation on the Master Syllabus Change/rationale:
c. $\square$ Course pre-requisites on the Master Syllabus Change/rationale:
d. $\square 1^{\text {st }}$ Day Handouts Change/rationale:
e.Course assignments
Change/rationale:
f.Course materials (check all that apply)
g.Instructional methods Change/rationale:
h.Individual lessons \& activities

## Course Assessment Report

Change/rationale:
3. What is the timeline for implementing these actions?

- Not applicable.
IV. 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 assessment tool highlights the fact that students who pass ECO 211 are performing at least as well as students at other schools.

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.
3. Which outcomes from the master syllabus have been addressed in this report?

All $\qquad$ X Selected If "All", provide the report date for the next full review: $\qquad$ Winter 2012 $\qquad$ .
If "Selected", provide the report date for remaining outcomes: $\qquad$ .

Submitted by:

Print:_Gregg Heidebrink Facully/Preparer



Date: $8-24-10$
 Date: $8-24-10$ signature B', ABErnets DateAUG252010


## Course Assessment Report

## Background Information

1. Course assessed:

Course Discipline Code and Number: ECO2 11
Course Title: Principles of Economics I
Division/Department Codes: H/SS
2. Semester assessment was conducted (check one):Fall 20
$\triangle$ Winter 2006
$\square$ Spring/Summer 20
3. Assessment tool(s) used: check all that apply.PortfolioStandardized test
Other external certification/licensure exam (specify):SurveyPromptDepartmental exam
Capstone experience (specify):Other (specify):
4. Have these tools been used before?
$\triangle$ YesNo
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.

65/250
6. Describe how students were selected for the assessment.

All students in even-numbered sections were given the tool.

## Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment. Emphasize the effects of international trade on U.S. macroeconomic conditions.
2. State each outcome from the master syllabus that was assessed. All, since the standardized test used (TUCE III; Macroeconomics) tests across all macroeconomic content areas.
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.
The TUCE III; Macroeconomics test consists of 30 multiple-choice questions administered in a pre and post test format. The results show that $78.5 \%$ of those assessed had higher post test scores. Results show that, on average, post test scores were $96 \%$ higher than the pre test scores. See 'Data Summary and Comments' attached.
4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success.
The criteria for success is two-fold. The department had set as a success indicator that $75 \%$ of those assessed achieve a higher post score. The results were that $78.5 \%$ did so. Further, the department had set as a success indicator a gain of $50 \%$ from pre test score to post test score. The average gain, across all sections, was $96.0 \%$
5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

Strengths: 1) Identifying the factors fostering economic growth. 2) Identifying effect(s) of spending changes on macroequilibrium.

Weaknesses: 1) Identifying the relationship between federal deficits and inflation. 2) Identifying appropriate policy responses to inflation in a full-employment economy.

## 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.
Weaknesses were found in areas that are generally addressed at or near the end of the semester and may not be given sufficient time and/or emphasis. Greater emphasis should be given to such "policy matters" in presenting the course.
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.

Master syllabus
Change/rationale:Curriculum
Change/rationale:
Course syllabus
Change/rationale:
$\square$ Course assignments
Change/rationale:
X Course materials (check all that apply)
Textbook
B Handouts
O Other:
Change/rationale: Either through homework (handout) assignments, or in-class discussion, greater emphasis on the appropriate policy responses to typical macroeconomic scenarios.
$\qquad$ 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.
TUCE III is a standardized test in wide use to assess student performance in principles of economics courses.
TUCE III tests knowledge that forms the core competencies indicative of student success in macroeconomic principles. The results indicated above are consistent with the expectations of the department.
2. If the assessment tools were not effective, describe the changes that will be made for future assessments. Note: An updated version of the TUCE test, TUCE IV, is forthcoming.

## Course Assessment Report



Date: $\qquad$
Date: $\qquad$ Date: JUN 272006

