Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Heating, Ventilation, Air Conditioning and Refrigeration	101	HVA 101 02/01/2018-Heating, Ventilation and Air Conditioning I
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Heating, Ventilation and A/C	Brian Martindale
Date of Last Filed Assessment Report		

I. Assessment Results per Student Learning Outcome

Outcome 1: Identify the major components of an A/C system.

- Assessment Plan
    - Assessment Tool: A departmental final exam will be used to assess understanding of key concepts
    - Assessment Date: Winter 2020
    - Course section(s)/other population: 2 sections
    - Number students to be assessed: Random 24-48 students
    - How the assessment will be scored: Answer key
    - Standard of success to be used for this assessment: Minimum of 70% of students will achieve a score of 70% or higher
    - Who will score and analyze the data: Departmental 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)
2017, 2016		2016

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

# of students enrolled	# of students assessed
64	31

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.

We assessed all the students that we had final exams for. There were 5 sections during this time period and I was able to get exams for 3 of them. In the future we will work to make sure that data from all sections is available.

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.

All students taught on campus.

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

Specific final exam questions based on outcome #1 were reviewed and the number of correct answers were counted. Then we determined the percentage of the correct answers.

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
Based on the results, a minimum of 84% of the students correctly answered each question. This meets the standard of success that 70% of the students will score 70% or higher. The details are: Question 17- 28 of 31 students (90%) correctly answered the question. Question 20- 26 of 31 students (84%) correctly answered the question. Question 64- 30 of 31 students (97%) correctly answered the question. Question 65- 28 of 31 students (90%) correctly answered the question. Students did very well on 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 very well on outcome #1.

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 performed least well on question #20. This question will be reviewed to determine if the question needs to be revised or include additional instruction on this topic.

Outcome 2: Recognize the physical state of the refrigerant as it circulates in the refrigeration cycle.

- Assessment Plan
    - Assessment Tool: A departmental final exam will be used to assess understanding of key concepts
    - Assessment Date: Winter 2020
    - Course section(s)/other population: 2 sections
    - Number students to be assessed: Random 24-48 students
    - How the assessment will be scored: Answer key
    - Standard of success to be used for this assessment: Minimum of 70% of students will achieve a score of 70% or higher
    - Who will score and analyze the data: Departmental 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)
2017, 2016		2016

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

# of students enrolled	# of students assessed
64	31

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.

We assessed all the students that we had final exams for. There were 5 sections during this time period and I was able to get exams for 3 of them. In the future we will work to make sure that data from all sections is available.

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.

All students taught on campus.

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

Specific final exam questions based on outcome #2 were reviewed and the number of correct answers were counted. Then we determined the percentage of the correct answers.

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
Based on the results, a minimum of 77% of the students correctly answered each question. This meets the standard of success that 70% of the students will score 70% or higher. The details are: Question 21- 28 of 31 students (90%) correctly answered the question. Question 45- 31 of 31 students (100%) correctly answered the question. Question 56- 29 of 31 students (94%) correctly answered the question. Question 59- 24 of 31 students (77%) correctly answered the question. Students did very well on 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 very well on outcome #2.

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 performed least well on question #59. This question will be reviewed to determine if the question needs to be revised or include additional instruction on this topic.

Outcome 3: Identify the major components of a furnace and their proper operation.

- Assessment Plan
    - Assessment Tool: A departmental final exam will be used to assess understanding of key concepts
    - Assessment Date: Winter 2020
    - Course section(s)/other population: 2 sections
    - Number students to be assessed: Random 24-48 students
    - How the assessment will be scored: Answer key
    - Standard of success to be used for this assessment: Minimum of 70% of students will achieve a score of 70% or higher
    - Who will score and analyze the data: Departmental 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)
2017, 2016		2016

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

# of students enrolled	# of students assessed
64	31

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.

We assessed all the students that we had final exams for. There were 5 sections during this time period and I was able to get exams for 3 of them. In the future we will work to make sure that data from all sections is available.

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.

All students taught on campus.

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

Specific final exam questions based on outcome #3 were reviewed and the number of correct answers were counted. Then we determined the percentage of the correct answers.

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
Based on the results, a minimum of 84% of the students correctly answered each question. This meets the standard of success that 70% of the students will score 70% or higher. The details are: Question 10- 29 of 31 students (94%) correctly answered the question. Question 25- 26 of 31 students (84%) correctly answered the question. Question 34- 28 of 31 students (90%) correctly answered the question. Question 57- 29 of 31 students (94%) correctly answered the question. Students did very well on 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 very well on outcome #3.

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 performed least well on question #25. This question will be reviewed to determine if the question needs to be revised or include additional instruction on this topic.

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?

I was pleasantly surprised at the high rate of success across the board for all 3 ourtcomes.

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

The results of the outcomes and course assessment will be discussed at a future department meeting.

3. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Other: Exam Questions and related content	We will review the exam questions where students received a lower score (#20, 25 and 59) to determine if the questions need to be revised or we need to spend more time focusing on the content.	The review will allow us to either revise the questions to collect more accurate data or change how we focus on the content so that students are more successful in the course.	2019

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

5.

III. Attached Files

HVA 101 Outcomes

Faculty/Preparer:	Brian Martindale	**Date:** 04/03/2018
Department Chair:	Robert Carter	**Date:** 05/13/2018
Dean:	Brandon Tucker	**Date:** 05/24/2018
Assessment Committee Chair:	Shawn Deron	**Date:** 08/24/2018

Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Heating, Ventilation, Air Conditioning and Refrigeration	101	HVA 101 07/09/2015-Heating, Ventilation and Air Conditioning I
Division	Department	Faculty Preparer
Advanced Technologies and Public Service Careers	Heating, Ventilation and A/C	Michael Kontry
Date of Last Filed Assessment Report		

I. Assessment Results per Student Learning Outcome

Outcome 1: Identify the major components of an A/C system.

- Assessment Plan
  - Assessment Tool: Written departmental final at conclusion of course
  - Assessment Date: Fall 2012
  - 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)
2013, 2012	2014	2014, 2013

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

# of students enrolled	# of students assessed
115	81

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.

81 students completed final exam. Exams from some instructors were not available for assessment. All other students were included in the assessment.

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

All students were selected.

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

Multiple choice questions from final exam related to the outcome using an answer 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
81.8% of the students scored correctly on this outcome. The standard of success was 70% of the students will score 70% or higher.

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

Students seem to have a good understanding of A/C parts.

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 may need more instruction on sizing of A/C tubing.

Outcome 2: Recognize the physical state of the refrigerant as it circulates in the refrigeration cycle.

- Assessment Plan
    - Assessment Tool: Written departmental final at conclusion of course
    - Assessment Date: Fall 2012
    - 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)
2013, 2012	2014	2014, 2013

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

# of students enrolled	# of students assessed
115	81

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.

81 students completed final exam. Exams from some instructors were not available for assessment. All other students were included in the assessment.

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

All students were selected.

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

Multiple choice questions from final exam related to the outcome using an answer 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
75.3% of the students scored correctly on this outcome. The standard of success was 70% of the students will score 70% or higher.

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

Students seem to have a good understanding of the state of refrigerant in the cycle.

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.

Further explanation of the saturated temperature and pressure may be required.

Outcome 3: Identify the major components of a furnace and their proper operation.

- Assessment Plan
    - Assessment Tool: Written departmental final at conclusion of course
    - Assessment Date: Fall 2012
    - 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)
2013, 2012	2014	2014, 2013

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

# of students enrolled	# of students assessed
115	81

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.

81 students completed the final exam. Exams from some instructors were not available for assessment. All other students were included in the assessment.

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

All students were selected.

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

Multiple choice questions from final exam related to the outcome using an answer 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
79.6% of the students scored correctly on this outcome. The standard of success was 70% of the students will score 70% or higher.

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

Students have a good understanding of furnace parts.

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 may need more instruction on furnace venting.

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 overall student understanding of furnace and air conditioning parts seems well above the expected average. The proper use of the pressure and temperature refrigeration chart will be stressed more in future classes.

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

All instructors of the HVA 101 course will be verbally informed of this need.

3. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
No changes intended.			

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

5.

III. Attached Files

HVA 101 Assessment document

Faculty/Preparer:	Michael Kontry	**Date:**	07/14/2015
Department Chair:	Michael Kontry	**Date:**	07/16/2015
Dean:	Brandon Tucker	**Date:**	08/10/2015
Assessment Committee Chair:	Michelle Garey	**Date:**	09/21/2015

COURSE ASSESSMENT REPORT

I. Background Information

1. Course assessed:
   Course Discipline Code and Number: HVA 101
   Course Title: Heating, Ventilating, and Air Conditioning I
   Division/Department Codes: Vocational Technology/HVAC

2. Semester assessment was conducted (check one):
   - ☒ Fall 2008
   - ☐ Winter 20__
   - ☐ Spring/Summer 2006

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

4. Have these tools been used before?
   - ☒ Yes
   - ☐ No

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

   Yes, wording and order of questions on the departmentally developed final exam

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

   24 of 24 students

6. Describe how students were selected for the assessment.

   All students completing the final exam for HVA 101 courses were assessed.

II. Results

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

   - **More emphasis was placed on the purpose and function of the four major components of a refrigeration and air conditioning system.**
   - **Visual aids were used to achieve a higher level of student understanding of the physical states of a solid liquid or vapor.**

2. State each outcome (verbatim) from the master syllabus for the course that was assessed.

1. **Identify the major components of an A/C system.**
2. **Recognize the physical state of refrigerant as it circulates in the refrigeration cycle.**
3. **Demonstrate the ability to identify the major components of a furnace and their proper operation.**
4. **Identify basic theories of safety, tool usage, electricity, and thermodynamics.**

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.***

Students met the standard of success in all of the above listed outcomes.

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.***

Standard of success: 70% of students meet all outcomes

Percentage of comprehension for Outcome 1-4			
1	2	3	4
78%	85%	81%	82%

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

Strengths:

- **Students had a strong ability to identify the uses of tools, calibration of instruments, and molecular theory.**

Weaknesses:

- **Outcome 1 questions: 13, 15, 16, and 64**
- **Outcome 2 questions: 65, and 71**
- **Outcome 3 questions: 10**
- **Outcome 4 questions: 1, 4, 5, 27, 32, 33, 34, 36, 39, and 68**

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.

- **Create an exercise which will teach students how to calculate the amount of BTU's required to cause a specified temperature rise or drop in a given substance.**
- **Create an experiment that will demonstrate to students the effect temperature change has on the substances pressure.**

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. ☐ Outcomes/Assessments on the Master Syllabus
   Change/rationale:

   b. ☐ Objectives/Evaluation on the Master Syllabus
   Change/rationale:

   c. ☐ Course pre-requisites on the Master Syllabus
   Change/rationale:

   d. ☐ 1st Day Handouts
   Change/rationale:

e. ☐ Course assignments
Change/rationale:

f. ☐ Course materials (check all that apply)
☐ Textbook
☐ Handouts
☐ Other:

g. ☒ Instructional methods
Change/rationale:

- **Create an exercise which will teach students how to calculate the amount of BTU's required to cause a specified temperature rise or drop in a given substance.**

- **Create an experiment that will demonstrate to students the effect temperature change has on the substances pressure.**

h. ☐ Individual lessons & activities
Change/rationale:

3. What is the timeline for implementing these actions? Winter 2009

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 departmentally developed final exam proved to a very effective tool in assessment of this course.

   The use of a standardized departmental exam made assessing all students equally easy and effective.

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
   If "All", provide the report date for the next full review: Fall 2011.
   If "Selected", provide the report date for remaining outcomes: _____.

Submitted by:

Name: Les Pullins Les Pullins Date: Feb. 17, 2009
Print/Signature

Department Chair: Les Pullins Les Pullins Date: Feb. 17, 2009
Print/Signature

Dean: _____ Date: 2/23/09
Print/Signature

logged 2/24/09 s'vgv

COURSE ASSESSMENT REPORT

I. Background Information

1. Course assessed:
   Course Discipline Code and Number: HVA 101
   Course Title: Heating, Ventilating, and Air Conditioning I
   Division/Department Codes: Vocational Technology/WAF

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

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

4. Have these tools been used before?
   - ☐ Yes
   - ☒ No

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

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

   All students taking departmental exam were assessed

6. Describe how students were selected for the assessment.

   All students completing the final exam for HVA 101 courses were assessed.

II. Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment.
   - No previous assessment was conducted.

2. State each outcome (verbatim) from the master syllabus for the course that was assessed.
   - **Identify the major components of an A/C system.**
   - **Recognize the physical state of refrigerant as it circulates in the refrigeration cycle.**
   - **Demonstrate the ability to identify the major components of a furnace and their proper operation.**

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.***

   Students met the standard of success in all of the above listed outcomes.

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.***

Standard of success: 70% of students meet all outcomes

Level of success for objectives 1-4			
Objective 1	**Objective 2**	**Objective 3**	**Objective 4**
71%	**84%**	**83%**	**85%**

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

   Strengths:

   - Students had a strong ability to identify the physical state of refrigerant as it flowed through the Air conditioning system.

   Weaknesses:

   - Outcome 1 questions: 12, 15, 16, 69, and 72
   - Outcome 2 questions: 5, 13, and 14
   - Outcome 3 questions: 58, and 59
   - Outcome 4 questions: 6, 22, 30, 34, 35, 37, 40, 41, and 46

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.

   - Re-emphasize the purpose and function of the four major components of a refrigeration and air conditioning system.
   - To achieve a higher level of student understanding of the physical states of a solid liquid or vapor visual aids could be used.
   - The purchase and installation of different types of furnaces for students to observe could make them further aware of their differences.
   - Electrical knowledge is briefly touched upon during this class further explanation will be given during HVA 103 which is primarily an electrical class. The creation of a lab exercise teaching tool identification, safety, and usage could possibly increase the student comprehension.

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. ☐ Outcomes/Assessments on the Master Syllabus
   Change/rationale:

   b. ☐ Objectives/Evaluation on the Master Syllabus
   Change/rationale:

   c. ☐ Course pre-requisites on the Master Syllabus
   Change/rationale:

   d. ☒ 1st Day Handouts
   Change/rationale:

- **Updating lab activity handouts will give students a better guide to learning the components of a furnace and air conditioner, and their function.**

e. ☐ Course assignments
Change/rationale:

f. ☒ Course materials (check all that apply)
☐ Textbook
☒ Handouts
☒ Other: **The purchase and installation of different types of furnaces and air conditioners, for students to observe could make them further aware of their differences.**

g. ☒ Instructional methods
Change/rationale:

- **The use of recently purchased instructional video's may prove to help students who learn through different methods, students can also view these instructional videos in the library if they need further review.**

h. ☐ Individual lessons & activities
Change/rationale:

3. What is the timeline for implementing these actions? Winter 2007

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 use of a standardized departmental exam made assessing all students equally easy and effective.

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
   If "All", provide the report date for the next full review: Fall 2009.
   If "Selected", provide the report date for remaining outcomes: _____.

Submitted by:

Name: Leo Pullins Leo Pullins Date: 1-4-07
Print/Signature

Department Chair: William Figg William Figg Date: 1-5-07
Print/Signature

Dean: B Greene B Greene Date: 1-5-07
Print/Signature

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