

Course Assessment Report  
Washtenaw Community College

Discipline	Course Number	Title
Health Science	124	HSC 124 05/24/2023- Medical Terminology
College	Division	Department
Health Sciences	Health Sciences	Health Science
Faculty Preparer		Mary Smyth
Date of Last Filed Assessment Report		02/25/2019

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

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

Yes

Spring/Summer 2018

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

In the previous assessment, the standard of success for two out of three of the Learning Outcomes (LO) was met.

LO #1: 100% of students scored above 70% on the final exam; standard of success met.

LO #2: The course did not have a tool in place to measure students' ability to pronounce medical terms; the standard was not met.

LO #3: 100% of students scored above 78% on the final exam; standard of success met.

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

LO #2 was changed from the previous master syllabus because pronunciation was not assessed with an oral exam. The new outcome focuses on the recognition of diseases related to different body systems.

Each outcome had an increase in assessment-related questions with modified test questions.

## II. Assessment Results per Student Learning Outcome

Outcome 1: Analyze, define, build and spell medical terms.

- Assessment Plan
  - Assessment Tool: Written final exam
  - Assessment Date: Spring/Summer 2021
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Answer key
  - Standard of success to be used for this assessment: 75% of students taking the final will score an average of 70% or higher on the outcome-related questions.
  - Who will score and analyze the data: Course instructors and 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)
2022	2023	

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

# of students enrolled	# of students assessed
243	199

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.

The difference in the number of students is the result of students withdrawing/dropping the course or not completing the assessment tool.

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.

From the nine semesters assessed, six were online and three were in-person.

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

Students take a 90-question multiple-choice exam. Prior to the final exam, there are five exams covering three chapters each; there are 45 questions on each of these exams.

All exams are scored with 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

The assessment result for LO #1: 99% (198/199) of students scored above 70% on the outcome-related questions. 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 performed well on recognizing, analyzing, and spelling medical terms.

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 extremely well in analyzing and spelling medical terms. The plan is to continue with the current curriculum and assessment tools.

## Outcome 2: Recognize diseases related to different human body systems.

- Assessment Plan
  - Assessment Tool: Written final exam
  - Assessment Date: Spring/Summer 2021
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Answer key
  - Standard of success to be used for this assessment: 75% of students taking the final will score an average of 70% or higher on the outcome-related questions.

- Who will score and analyze the data: Course instructors and 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)
2022	2023	

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

# of students enrolled	# of students assessed
243	197

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.

The difference in the number of students is the result of students withdrawing/dropping the course or not completing the assessment tool.

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.

From the nine semesters assessed six were online and three were in-person.

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

Students take a 90-question multiple-choice exam. Prior to the final exam, there are five exams covering three chapters each; there are 45 questions on each of these exams.

All exams are scored with 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

The assessment result for LO #2: 97% (194/197) of students scored above 70% on the outcome-related questions. 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 performed well on recognizing diseases related to different human body systems. This is a new LO from the previous assessment.

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 extremely well recognizing diseases related to different body systems. The current curriculum seems to provide students with the skills they need to successfully meet this outcome. The updated outcome and assessment plan is effectively assessing student learning.

Outcome 3: Recognize medical procedures and laboratory diagnostic tests related to different human body systems.

- Assessment Plan
  - Assessment Tool: Written final exam
  - Assessment Date: Spring/Summer 2021
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Answer key
  - Standard of success to be used for this assessment: 75% of students taking the final will score an average of 70% or higher on the outcome-related questions.
  - Who will score and analyze the data: Course instructors and 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)
2022	2023	

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

# of students enrolled	# of students assessed
243	199

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.

The difference in the number of students is the result of students withdrawing/dropping the course or not completing the assessment tool.

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.

From the nine semesters assessed six were online and three were in-person.

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

Students take a 90-question multiple-choice exam. Prior to the final exam, there are five exams covering three chapters each; there are 45 questions on each of these exams.

All exams are scored with 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

The assessment result for LO #3: 97% (193/199) of students scored above 70% on the outcome-related questions. 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.

The assessment results support that students successfully recognize medical procedures and laboratory diagnostic tests related to different human body systems.

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.

No plans for change for LO #3 based on students' high success rate.

### 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.

LO#2 was updated based on the previous assessment results. The new LO#2 is effective in supporting students with successfully meeting the desired outcome.

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?

Overall this course is very successful in supporting students with meeting all three of the current Learning Outcomes. Removing the requirement to correctly pronounce the medical terms (not assessable for an online course) has been very successful as it allowed the assessment to focus instead on diseases and body systems.

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

The assessment plan will be shared with department faculty, particularly department faculty teaching this course.

4. Intended Change(s)

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

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

The Case Study videos in the Blackboard site were linked to an expired YouTube account. Suitable replacement videos need to be added/replaced in the master.

### III. Attached Files

[HSC 124 Assessment Data](#)

**Faculty/Preparer:** Mary Smyth **Date:** 06/27/2023  
**Department Chair:** Rene Stark **Date:** 06/29/2023  
**Dean:** Shari Lambert **Date:** 07/18/2023  
**Assessment Committee Chair:** Jessica Hale **Date:** 11/29/2023

**Course Assessment Report**  
**Washtenaw Community College**

Discipline	Course Number	Title
Health Science	124	HSC 124 12/10/2018- Medical Terminology
Division	Department	Faculty Preparer
Health Sciences	Health Science	Hiralal Dedhia
Date of Last Filed Assessment Report		

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

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

No

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

3.

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

5.

**II. Assessment Results per Student Learning Outcome**

Outcome 1: Analyze, build and spell medical terms.

- Assessment Plan
  - Assessment Tool: Written final exam
  - Assessment Date: Fall 2017
  - Course section(s)/other population: all sections
  - Number students to be assessed: Random sample of 75% of students completing the course
  - How the assessment will be scored: Answer key
  - Standard of success to be used for this assessment: 75% of students taking the final will have an overall average score of 70% or higher.

- Who will score and analyze the data: Course instructors and 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)
		2018

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

# of students enrolled	# of students assessed
22	20

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.

Twenty of the 22 students enrolled, who completed the exams, were assessed.

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.

Only one section of this course was offered in Spring/Summer 2018. All students in this face-to-face course were assessed.

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

Four multiple-choice exam questions related to analyzing, building and spelling medical terms were selected for the assessment. One question asked students to identify the medical terms that were spelled incorrectly. Another question asked students to select the correct definition of a medical term. The other questions asked students to recognize prefixes and suffixes and how they are used to build medical terms. These Blackboard questions were scored 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: <u>Yes</u>		
Exam	Question	Percent Correct
1	31	90.47%
14	11	82.32%

14	12	70.58%
14	43	94.11%

Students met the standard of success for outcome #1. They scored particularly well on questions #43 and #31. They did well on question #11 but struggled a bit on question #12.

Because of the limited number of questions, the data is provided here and not as an attachment.

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

Students did very well on analyzing and spelling medical terms. While there aren't as many spelling questions as there are other types, our interpretation that they do well on this could be assessed better with more 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.

They had a slightly more difficult time using prefixes and suffixes to build medical terms. Again, more questions will be helpful in assessing their performance on this task.

## Outcome 2: Pronounce medical terms.

- Assessment Plan
    - Assessment Tool: Oral exam
    - Assessment Date: Fall 2017
    - Course section(s)/other population: all sections
    - Number students to be assessed: Random sample of 75% of students completing the course
    - How the assessment will be scored: Answer key
    - Standard of success to be used for this assessment: 75% of students taking the oral exam will have an overall average score of 70% or higher.
    - Who will score and analyze the data: Course instructors and 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)
		2018

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

# of students enrolled	# of students assessed
22	20

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.

This course did not evaluate student's abilities to pronounce medical terms.

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.

This course did not evaluate student's abilities to pronounce medical terms.

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

This course did not evaluate student's abilities to pronounce medical terms.

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

This course did not evaluate student's abilities to pronounce medical terms.

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

This course did not evaluate students' abilities to pronounce medical terms.

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.

This course did not evaluate students' abilities to pronounce medical terms.

Outcome 3: Recognize diagnostic and laboratory tests related to different human body systems.

- Assessment Plan
  - Assessment Tool: Written final exam
  - Assessment Date: Fall 2017
  - Course section(s)/other population: all sections
  - Number students to be assessed: Random sample of 75% of students completing the course
  - How the assessment will be scored: Answer key
  - Standard of success to be used for this assessment: 75% of students taking the final will have an overall average score of 70% or higher.
  - Who will score and analyze the data: Course instructors and 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)
		2018

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

# of students enrolled	# of students assessed
22	20

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.

Twenty of the 22 students enrolled, who completed the exams, were assessed.

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.

Only one section of this course was offered in Spring/Summer 2018. All students in this face-to-face course were assessed.

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

Four multiple-choice exam questions related to recognizing diagnostic and medical tests were selected for the assessment. All four questions related to recognizing diagnostic and medical tests. These Blackboard questions are scored using an answer key.

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

Met Standard of Success: <u>Yes</u>		
Exam	Question	Percent Correct
4	7	80%
4	38	85%
9	35	83.33%
12	12	78.94%

Students met the standard of success for outcome #1. They scored particularly well on questions #43 and #31. They did well on question #11 but struggled a bit on question #12.

Because of the limited number of questions, the data is provided here and not as an attachment.

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

Students did very well recognizing diagnostic and laboratory tests related to specific body systems. Various types of tests were included in the test and students performed well.

- 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.

Overall, students did well in this course and seem to have a good grasp of medical terminology as required for this course and for further education in various medical careers. This course was designed for the medical billing and coding program. However, we find that students from other programs are taking this course and benefitting from the more extensive training in medical terminology.

### 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.

2.

3. 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?

Overall, this course is meeting the needs of students, particularly for medical billing and coding students. In addition, it expands the students' understanding of medical and diagnostic terms as students are communicating with medical team members and other professionals. Students are able to select the correct diagnostic term that would relate to the correct medical condition as used in medical billing and coding.

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

This assessment report will be shared with department faculty, particularly departmental faculty teaching this course.

- 5.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Outcome Language	Modify the master syllabus to remove outcome #2.	Pronunciation is not assessed in this course with an oral exam. The ability to use blackboard to do so will be explored in the future.	2019
Assessment Tool	Increase the assessment-related questions for each outcome to collect additional information. This may result in the need to modify test questions.	The number of questions assessed may not have provided sufficient data to identify potential problems or areas of weakness.	2019

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

As a part-time faculty member, this was the first assessment activity for Yvonne Rosa. She reported that it was a great experience and has caused her to be more interested in doing this work again.

### III. Attached Files

**Faculty/Preparer:** Hiralal Dedhia **Date:** 12/10/2018  
**Department Chair:** Rene Stark **Date:** 12/11/2018  
**Dean:** Valerie Greaves **Date:** 01/01/2019  
**Assessment Committee Chair:** Shawn Deron **Date:** 02/25/2019