

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Medical Billing and Coding	215	MBC 215 06/20/2023-Introductory Procedural Coding
College	Division	Department
Health Sciences	Health Sciences	Health Science
Faculty Preparer		Valerie Greaves
Date of Last Filed Assessment Report		06/26/2019

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

This course was previously assessed for Fall 2017 and Fall 2018.

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

Outcome 1- Students demonstrated competency in encoding of procedures on a practical exam (software program). 100% of students scored 78% or higher.

Outcome 2- Students demonstrated competency in principles of distinguishing, and accurately applying ICD-10-PCS, CPT-4 and HCPS coding systems on a practical exam (software program). 92% of students scored 100% or higher (there were extra credit questions on the exam which allowed the students to score higher than 100%).

Outcome 3- Students demonstrated competency in utilizing official coding guidelines and reporting requirements for code assignment on a practical exam (software program). 92% of students scored 80% or higher.

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

Intended Changes Completed: Additional worksheets with real-life scenarios and coding examples were added to the course, allowing more practice situations for the students.

II. Assessment Results per Student Learning Outcome

Outcome 1: Apply the rules, basic principles, and conventions of HCPCS level I and CPT level II classification systems.

- Assessment Plan
 - Assessment Tool: Outcome-related final exam questions
 - Assessment Date: Spring/Summer 2024
 - 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: 80% of the students will score 80% or higher on the outcome related questions.
 - 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)
2022		

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

# of students enrolled	# of students assessed
30	27

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

There were 30 students enrolled in the Fall 2022 course, three of the students did not complete the course or the final exam and thus were not assessed. A total of 27 students 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.

This course was offered in Fall 2022, the courses prior to Fall 2022 utilized different final exams with different questions. To maintain consistency with the

data collected, only the last class, Fall 2022 was used for the data collection and analysis.

This course was offered as an evening, on-ground course on main campus.

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

The assessment tool was a final exam that consisted of multiple-choice questions. The exam was scored through Blackboard (BB) and the results were calculated. There were nine (9) questions on the exam directly related to SLO #1 that were utilized in the analysis.

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

Fall 2022 - 26 out of 27 students scored 75% or higher overall. 90% of the students scored 75% overall. 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 scores on the final exam related to SLO#1 demonstrate that the students have a good working knowledge of the HCPCS Level 1 & CPT Level II classification systems and are able to apply rules, basic principles and conventions as needed.

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.

Overall the students scored very high on the exam questions for SLO #1, but there were two questions, 30 & 31, that multiple students missed, they referred to HCPCS codes used to identify such things as drugs, biologicals and types of medical equipment. These questions will be reviewed for validity as well as adding additional content to ensure a thorough understanding by the students.

Outcome 2: Conduct examination of provider documentation to extract accurate coding data, including operative reports, case studies, scenarios, and validate coding accuracy using clinical information found in the health record to code and sequence procedures and/or services from all sections of the HCPCS and CPT.

- Assessment Plan

- Assessment Tool: Outcome-related final exam questions
- Assessment Date: Spring/Summer 2024
- 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: 80% of the students will score 80% or higher on the outcome related questions.
- 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)
2022		

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

# of students enrolled	# of students assessed
30	27

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

There were 30 students enrolled in the Fall 2022 course, three of the students did not complete the course or the final exam and thus were not assessed. A total of 27 students 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.

This course was offered as an evening, on-ground course on main campus.

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

The assessment tool was a final exam that consisted of multiple-choice questions. The final exam questions were scored through BB and the results were calculated. There were two (2) questions on the exam directly related to SLO #2 that were utilized in the analysis.

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

Met Standard of Success: <u>No</u>
Fall 2022- 7 out of 27 students scored 75% or higher. 26% of the students scored 75% or higher. The standard of success was not met.

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

The low scores on these exam questions may have been skewed by the fact that there were only (2) questions related to SLO #2, which only made it possible for the students to score anything other than a 0%, 50% or 100%. More questions will be added to this cohort of questions.
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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.

Due to the low scores on these questions in the final, it is apparent that the students need more practice with the actual CPT coding for specific procedures. More practice with case scenarios and the practice of looking up CPT codes in the manual would assist with improving this outcome in the future.

Outcome 3: Accurately apply coding guidelines when assigning procedure/s and service/s from the CPT and HCPCS classification systems which support accurate and ethical billing through coding.

- Assessment Plan
 - Assessment Tool: Outcome-related final exam questions
 - Assessment Date: Spring/Summer 2024
 - Course section(s)/other population:
 - Number students to be assessed: All students
 - How the assessment will be scored: Answer key
 - Standard of success to be used for this assessment: 80% of the students will score 80% or higher on the outcome related questions.
 - 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)
2022		

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

# of students enrolled	# of students assessed
30	27

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

There were 30 students enrolled in the Fall 2022 course, three of the students did not complete the course or the final exam and thus were not assessed. A total of 27 students 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.

This course was offered in Fall 2022, the courses prior to Fall 2022 utilized different final exams with different questions. To maintain consistency with the data collected, only the last class, Fall 2022 was used for the data collection and analysis.

This course was offered as an evening, on-ground course on main campus.

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

The assessment tool was a final exam that consisted of multiple-choice questions. The exam was scored through BB and the results were calculated. There were seven (7) questions on the exam directly related to SLO #3 that were utilized in the analysis.

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

Fall 2022 - 27 out of 27 students scored 75% or higher overall. 100% of the students scored 75% overall. 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.

Based on the exam scores of the questions related to SLO #3, these students demonstrated great strength in the areas of coding guidelines, and the specific importance of punctuation in coding.

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.

We will continue to have assignments relevant to the use of coding guidelines as well as "hands on" use of the coding books.

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.

The additional course materials allowed students to have more opportunities to practice, and this helped reinforce student understanding of topics that were weaker in the previous assessment.

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

This course is essential in preparing students to be able to work as Certified Medical Billing & Coding professionals. I believe that this course is effective in educating our MBC students and preparing them to sit for certifications that they will qualify for after completion of the program. This is evidenced by the number of past graduates that are successfully working in the field.

The MBC program has had challenges with frequent turnover of part time faculty and the director, over the past several years. This has had an impact on the consistency in methods of instruction as well as in methods of evaluation, such as multiple varying final exams.

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

The MBC courses are all taught by part-time faculty and they meet regularly as a group with the director of the program. Results from this assessment, as well as the action plan will be shared with all of the part-time faculty at the next group meeting.

4.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	<ol style="list-style-type: none"> 1. Review final exam questions 30 & 31 for validity (SLO #1). 2. Add one more exam question related to SLO #1. 3. Add eight more exam questions related to SLO #2 for a total of 10 questions (SLO #2). 4. Add four more exam questions related to SLO #3. 	<p>Multiple students missed these two questions.</p> <p>Adding additional questions related to SLO#2 will possibly give a more accurate assessment of the students' knowledge in the area of extracting data.</p> <p>Each outcome will have 10 related exam questions to better measure student learning as well as align with the standard of success.</p>	2023
Course Assignments	<ol style="list-style-type: none"> 1. Add an additional assignment related to assigning HCPCS codes to such things as drugs, biologicals and types of medical equipment. (SLO #1) 2. Add an assignment with case scenarios involving assigning CPT codes. (SLO #2) 	<p>The additional assignments will give the students more exposure to areas with lower performance.</p>	2023

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

6.

III. Attached Files

[SLO #2 Data](#)

[SLO #1 Data](#)

[SLO #3 Data](#)

[MBC- Final Exam Questions](#)

Faculty/Preparer: Valerie Greaves **Date:** 07/12/2023

Department Chair: Rene Stark **Date:** 07/14/2023

Dean: Shari Lambert **Date:** 07/18/2023

Assessment Committee Chair: Jessica Hale **Date:** 11/22/2023

Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Medical Billing and Coding	215	MBC 215 04/25/2019-Introductory Procedural Coding
Division	Department	Faculty Preparer
Health Sciences	Health Science	Sheryl Krey
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: Perform basic hands-on encoding of procedures from narratives and other sources of information about patient care and treatment.

- Assessment Plan
 - Assessment Tool: Practical exam
 - Assessment Date: Winter 2017
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Answer Key/Checklist
 - Standard of success to be used for this assessment: 75% of students will score 75% or higher on exam.

- 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)
2018, 2017		

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

# of students enrolled	# of students assessed
26	26

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 were assessed for this course.

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 is an evening, face to face class.

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

The practical exam is a software program used to assess the students' learning of the narratives and sources of information from different scenarios related to patient care and treatment.

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
 All students (100%) scored 78% or above. The exam showed that the students need further education to assist with their learning and understanding of the material.

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

While the majority of the class performed very well, there were also a few students who may have needed assistance. Those that performed well knew the procedures and how to follow them to prepare a medical claim for reimbursement.

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.

The assessment showed that the percentage was very close to the standard of success. While the majority of the class appeared to have understood, it may be one or two students who may need to be assertive and spend additional time studying the procedures for proper coding. One on one may be useful to these students.

Outcome 2: Demonstrate principles of, distinguish, and accurately apply ICD-10-PCS, CPT-4, and HCPCS procedure coding systems.

- Assessment Plan
 - Assessment Tool: Practical exam
 - Assessment Date: Winter 2017
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Answer Key/Checklist
 - Standard of success to be used for this assessment: 75% of students will score 75% or higher on exam.
 - 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, 2018		

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

# of students enrolled	# of students assessed
26	26

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 in the course 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.

This is an evening, face to face class.

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

This was an exam with extra credit. This exam was T/F, multiple choice and short answer. These questions all pertained to the medical codes. The student had to be fully aware of how to distinguish between the ICD-10, CPT and HCPCS codes and use them appropriately.

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

This exam that included extra credit provided the students to exceed the 100% grade. Majority of the students accepted the challenge and completed the extra credit. All of the students showed that they were able to comprehend the course material as they all passed with 80% or greater. 92% of the students reached this goal. The percentage was received by tallying up the number of students who were 80% and greater and dividing that by the total number of students.

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

The students had a strong knowledge and understanding of the principles of coding, using the ICD-10, CPT and HCPCS. The strong grades reflected the students' understanding.

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 met the standard of success. The instructor could provide additional guidance, including where to find helpful resources.

Outcome 3: Use official coding guidelines and reporting requirements for code assignment.

- Assessment Plan
 - Assessment Tool: Practical exam
 - Assessment Date: Winter 2017
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Answer Key/Checklist
 - Standard of success to be used for this assessment: 75% of students will score 75% or higher on exam.
 - 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)
2018, 2017		

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

# of students enrolled	# of students assessed
26	26

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 were assessed for this course.

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 is an evening, face to face course.

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

The exam for this course was a practical exam with T/F questions, fill in the blank, and multiple choice answers. This exam tested the knowledge of codes assigned and usage of the guidelines for medical coding and reporting.

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>
92% of the students scored 80% or above.

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

The exam showed how the students performed with the use of coding guidelines and reporting requirements. With short answers, the students needed to prove they were using the required information correctly. Their success is demonstrated by the overall high percentage.

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 met the standard of success and repeating information with the students has proven to be advantageous. The students showed a true understanding of the codes following the guidelines for medical reimbursement.
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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.

No changes have been made to this course, as the structure seems sound.

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 outcomes were very good, while a few students showed slightly lower grades. Over all, it was impressive how well the class performed.

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

No changes will be made at this time, but should any changes be necessary, the changes should go to the Division Head prior to being implemented.

4. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Course Materials (e.g. textbooks, handouts, on-line ancillaries)	Provide additional worksheets with real-life scenarios and coding examples.	Encourage more practice which should result in better outcomes and a deeper knowledge of medical coding.	2019

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

6.

III. Attached Files

[MBC 215 Data](#)

Faculty/Preparer: Sheryl Krey **Date:** 04/25/2019

Department Chair: Rene Stark **Date:** 04/26/2019

Dean: Valerie Greaves **Date:** 05/03/2019

Assessment Committee Chair: Shawn Deron **Date:** 06/25/2019