

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Computer Information Systems	282	CIS 282 06/11/2021- Database Principles and Application
College	Division	Department
Business and Computer Technologies	Business and Computer Technologies	Computer Science & Information Technology
Faculty Preparer		Khaled Mansour
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: Identify concepts of data management for structured and unstructured data.

- Assessment Plan
 - Assessment Tool: Department created final exam - short answer/multiple choice questions
 - Assessment Date: Fall 2016
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: answer key

- Standard of success to be used for this assessment: 70% of the students will score 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)
2020	2021	

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

# of students enrolled	# of students assessed
59	49

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 except 10, and the reason is the withdrawal of seven students and three students who gave up and failed the 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.

The population of the students was from the evening sections and all sections were virtual.

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

The questions below from quizzes and the midterm exam were used to assess this outcome:

Quiz 1: Questions 1, 2, 3, 4, 8, 9, 10 and 12

Quiz 2: Questions 1, 2, 5 and 8

Midterm exam: Questions 1 through 10

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>
The data was collected from quizzes and the midterm exam. The result based on the data is the students were able to identify the concepts of database management. The standard of success was met: 86% of the students scored 81.6% (which is more than 75%).

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

The importance of database management was stressed throughout the entire course. The results show that students were able to identify the concepts of both structured and unstructured data as well as the implications for database relationships.

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 complexity of the material, most of the class time was spent in lecture with very little remaining for lab work. Learning how to build a solid relational database and master the queries requires additional lab time. Moving forward, the plan is to divide the lecture into two parts: two-thirds of the class time devoted to lecture and one-third goes to the lab time.
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Outcome 2: Apply techniques of data management.

- Assessment Plan
 - Assessment Tool: Department created final exam - short answer/multiple choice questions
 - Assessment Date: Fall 2016
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: answer key
 - Standard of success to be used for this assessment: 70% of the students will score 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)
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2020	2021	
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2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
59	49

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 except 10, and the reason is the withdrawal of seven students and three students who gave up and failed the 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.

The population of the students are from the evening sections and all sections were virtual.

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

The questions below from quizzes and the final exam were used to assess this outcome:

Quiz 4: Questions 1, 2, 3, 4, 5 and 10

Quiz 5: Questions 1 through 5

Final exam: Part 2

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 data was collected from quizzes and the final exam. The result based on the data is the students were able to identify the concepts of the database management. 85.7% of the students scored 85.6% which is higher than 70%. 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 demonstrate students' ability to build short queries, and small databases, including normalization and relationships. Student also excelled at manipulating the tables.

- 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 existing course material meets the need of the students in learning this outcome. That said, students have expressed interest in an advanced course or more time to learn in practice how to do some security or recovery, backup big database data and learn very complicated SQL statements. The plan is one day to add an extra credit hour to this course to add more important material instead of adding an extra course.

III. Course Summary and Intended Changes Based on Assessment Results

- 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 previous assessment report

- 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?

Based on the results, the course meets the needs of the students. However, in the interest of improving student achievement, it is recommended that additional lab time be required. Listening to lecture, as well as getting to practice during the class time on the college server data, will improve student learning and understanding.

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

The plan is to start adding lab time in the Fall 2021 and take advantage of the small number of the students in the class because of the COVID-19 and the new meeting method of teaching.

- Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	Add a lab-related assessment tool.	As lab time is added to the course, an additional	2021

		assessment tool would help us assess student learning occurring in lab.	
Other: add lab time	Add lab time to the course.	Additional lab time will give students an opportunity to practice more of the concepts learned in the course. Hands-on learning in class will motivate students to engage with lectures and practice on their own at home.	2021

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

Recommendation for adding an extra credit hour to the course.

III. Attached Files

[CIS 282 Fall 20 and Winter 21 Data](#)

Faculty/Preparer: Khaled Mansour **Date:** 06/20/2021
Department Chair: Cyndi Millns **Date:** 06/21/2021
Dean: Eva Samulski **Date:** 06/21/2021
Assessment Committee Chair: Shawn Deron **Date:** 09/20/2021