

**Course Assessment Report  
Washtenaw Community College**

Discipline	Course Number	Title
Business Office Systems	182	BOS 182 09/08/2021- Database Software Applications
College	Division	Department
Business and Computer Technologies	Business and Computer Technologies	Business
Faculty Preparer		Mary Pinter
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: Use Microsoft Access to create personal and/or business databases following accepted design principles.

- Assessment Plan
  - Assessment Tool: Final project
  - Assessment Date: Fall 2013
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Final project scored with a checklist.

- Standard of success to be used for this assessment: 75% will score 75% or higher on the final project.
- 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	2021

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

# of students enrolled	# of students assessed
24	16

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 number of students assessed includes only student completers of BOS 182. Students did not complete the course for a variety of reasons including: health, family issues, work conflicts, etc., resulting in a failure to complete course requirements.

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 in all sections were assessed. The course is primarily offered as a Distance Learning (DL) course and all students included in this assessment participated in a DL format.

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

Outcome #1 was assessed using the second step of the final project titled Tables and Relationships and scored using a rubric.

The scoring rubric is equally scored (Range of 0-5) for a total score possible of 20 using the following four criteria:

1. Three tables created, Leszynski naming conventions used, Primary Keys defined, and sample data entered.
2. Different data types including Short Text, Long Text, Date/Time, Number, and Yes/No used

3. Various field properties including Combo boxes, Input Masks, Validation Rules, and Default Values used.
4. Relationships are created using Referential Integrity.

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%) met the standard of success for Outcome #1. Students performed well on rubric items 1 and 2, where 16 (100%) students scored 75% or higher. Students did fair on rubric item 3, where 14 of 16 (88%) scored 75% or higher. Rubric item 2 assessed student ability to use proper object naming conventions. Students also performed well on rubric item 4 where 15 of 16 (94%) scored 75% or higher.

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

Students were able to successfully complete the critical first steps necessary for the design and development of a relational database. For many students, BOS 182 is their first exposure to database structure and principals. Successfully completing the critical second step of this project, creating tables and relationships, indicates instructional materials prepare and support students in the development process.

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.

While 100% of students achieved Outcome #1, three identified areas could be improved:

1. Item #1: Incorrect/Missing use of industry naming rules (Leszyinski naming conventions)
2. Item #2: Missing use of a variety of data types within tables - The requirements missed are listed on the course assignment description.
3. Item #3: Incorrect/Missing creation of Relationships - Current course site includes examples and discussion beyond textbook materials.

Outcome 2: Design and develop a relational database.

- Assessment Plan
  - Assessment Tool: Final project
  - Assessment Date: Fall 2013
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students
  - How the assessment will be scored: Final project scored with a checklist.
  - Standard of success to be used for this assessment: 75% will score 75% or higher on test and checklist.
  - 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	2021

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

# of students enrolled	# of students assessed
24	16

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 number of students assessed includes only student completers of BOS 182. Students did not complete the course for a variety of reasons including health, family issues, work conflicts, etc., resulting in a failure to complete course requirements.

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 in all sections were assessed. The course is primarily offered as a Distance Learning (DL) course and all students included in this assessment participated in a DL format.

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

Outcome #2 was assessed using the third, fourth and fifth step of the final project which requires students to create Queries, Forms, Reports and a Navigation Form. Each step is scored using a rubric. Criteria and scoring for these steps include:

Query Rubric:

- Create Query 1 utilizing at least two tables, four fields, criteria for two fields, and one sort. Score range = 0 - 5
- Create Query 2 utilizing at least four fields and an expression formatted using properties. Score range = 0 - 5
- Create Query 3 utilizing at least four fields and a parameter message. Score range = 0 - 5

Forms and Reports Rubric:

- Create a form with subform includes a logo, titles, current date, and command buttons. The tabular or stacked layout is used and the tab order is logical. Score range = 0 - 10
- Create a form with Tab Control includes a logo, titles, current date, and command buttons. The tabular or stacked layout is used and the tab order is logical. Score range = 0 - 10
- Create a report of choice formatted professionally and sorted in a logical order. The report also includes a logo, a title, and the current date. Score range = 0 - 5
- Create a grouping report is formatted professionally and sorted in a logical order. The report also includes a company logo, a title, and the current date. Score range = 0 - 5

Navigation Form Rubric:

- Create a navigation form that includes two reports and two form tabs. Display properties are set correctly. Score Range = 0 - 8
- Set the navigation form to open on startup. Score range = 0 - 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

All students (100%) met the standard of success for Outcome #2.

- Students performed well on Query rubric items 1 and 3, where 16 (100%) students scored 100%.
- Students did fair on Query rubric item 2, where 14 of 16 (88%) scored 75% or higher.
- Students performed well on Forms and Reports rubric items 1, 2, 3 and 4 where 16 students scored 100%.
- Students performed well on Navigation Form rubric items 1 and 2 where 14 of 16 (88%) scored 75% or higher.
- Two students performed poorly on Navigation Form rubric items 1 and 2, scoring 0%. This low score is the result of non-submission of this step of the final project.

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

All students (100%) met the standard of success for Outcome #2. This high level of success reflects very good student learning by demonstrating the ability to transfer new skills through the design and development of a personal relational database framework described in 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.

While 100% of students achieved Outcome #2, one identified area could be improved:

- Database with Queries, Item #2: Incorrect queries using expressions submitted.

Outcome 3: Communicate in a business setting using database management terminology.

- Assessment Plan
  - Assessment Tool: Two multiple choice/true false tests with hands-on component
  - Assessment Date: Fall 2013
  - Course section(s)/other population: All sections
  - Number students to be assessed: All students

- How the assessment will be scored: Multiple choice/true false tests are scored with an answer key and hands-on component are scored with a checklist.
- Standard of success to be used for this assessment: 75% will score 75% or higher on test and final project.
- 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	2021

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

# of students enrolled	# of students assessed
24	16

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 number of students assessed includes only student completers of BOS 182. Students did not complete the course for a variety of reasons including health, family issues, work conflicts, etc., resulting in a failure to complete course requirements.

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 in all sections were assessed. The course is primarily offered as a Distance Learning (DL) course and all students included in this assessment participated in a DL format.

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

Outcome #3 was assessed using student scores obtained from three multiple choice and true-false unit exams. Exam 1 and 2 were comprised of 20 questions while Exam 3 comprised of 10. Exams are completed within the Blackboard testing tool. Students are allowed one attempt (not timed) to complete each exam and the use of notes, textbooks, other resources are allowed. All exams are scored immediately upon completion by the Blackboard tool.

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>
All students (100%) met the standard of success for Outcome #3. Within each exam the results were also very good. Specifically: <ul style="list-style-type: none"><li>o All students (100%) met the standard of success for Exam #1 of Outcome #3.</li><li>o All students (100%) met the standard of success for Exam #2 of Outcome #3.</li><li>o 15/16 (94%) of students met the standard of success for Exam 3 of Outcome #3.</li></ul>

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

All students (100%) met the standard of success for Outcome #3. This high level of success reflects student's ability communicate in a business setting using database management terminology and processes.
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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.

Multiple Choice/True-False format assessments require careful reading followed by interpretation and the ability to select the correct response. Timely student reminders to read slowly and carefully can support a successful outcome.
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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.

There is no previous assessment report.
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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?

Based upon all supporting data, BOS 182 is effectively supporting student learning, demonstrated through the successful design and development of a personal relational database. I believe BOS 182 is meeting the needs of students. For many students, this course represents a first exposure to databases. Each skill in the course builds upon a previous skill, requiring students to quickly gain and apply these new concepts. Based upon student feedback, while often challenging and sometimes frustrating, the final project results in a very positive emotion of achievement.

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

Once approved, the assessment results will be shared with BOS instructors for additional discussion and comments.

4. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Course Materials (e.g. textbooks, handouts, on-line ancillaries)	<p>Outcome #1</p> <ol style="list-style-type: none"> <li>1. Tables and Relationships, Item #1 Additional supporting documents/information added to the student course site regarding naming conventions.</li> <li>2. Tables and Relationships, Item #2: Add reminders to read project guidelines carefully.</li> <li>3. Tables and Relationships, Item #3: Continued use of a variety of resources as well as prompt instructor feedback and the resubmission of student work.</li> </ol>	The suggested changes listed here are intended to enhance current instructional design and current course resources.	2022

	<p>Outcome #2</p> <p>4. Database with Queries, Item #2: Prompt instructor feedback and student resubmission of incorrect queries.</p> <p>Outcome #3</p> <p>5. Timely student reminders to read all questions and statements slowly and carefully can support a successful outcome.</p>		
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5. Is there anything that you would like to mention that was not already captured?

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**III. Attached Files**

[BOS 182 Assessment Date](#)

**Faculty/Preparer:** Mary Pinter **Date:** 09/13/2021  
**Department Chair:** Douglas Waters **Date:** 09/16/2021  
**Dean:** Eva Samulski **Date:** 09/20/2021  
**Assessment Committee Chair:** Shawn Deron **Date:** 11/22/2021