

## Washtenaw Community College Comprehensive Report

### BOS 284 Spreadsheet Software Applications II

Effective Term: Spring/Summer 2024

#### Course Cover

**College:** Business and Computer Technologies

**Division:** Business and Computer Technologies

**Department:** Business

**Discipline:** Business Office Systems

**Course Number:** 284

**Org Number:** 13200

**Full Course Title:** Spreadsheet Software Applications II

**Transcript Title:** Spreadsheet Software Apps II

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Three Year Review / Assessment Report

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Outcomes/Assessment**

**Objectives/Evaluation**

**Rationale:** Three-year review

**Proposed Start Semester:** Winter 2024

**Course Description:** In this course, students will learn advanced techniques using Microsoft Excel. Skills and concepts include working with named ranges and structured references, using auditing tools to analyze data, creating scenarios, creating data maps and pivot tables, creating and using macros, and using workbook protection. Group participation in solving complex formulas and functions is a required part this course. This is the second of two courses in spreadsheet applications.

#### Course Credit Hours

**Variable hours:** No

**Credits:** 3

**Lecture Hours: Instructor: 45 Student: 45**

**Lab: Instructor: 0 Student: 0**

**Clinical: Instructor: 0 Student: 0**

**Total Contact Hours: Instructor: 45 Student: 45**

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

#### College-Level Reading and Writing

College-level Reading & Writing

#### College-Level Math

Level 2

**Requisites****Prerequisite**

BOS 184 minimum grade "C"

**General Education****General Education Area 7 - Computer and Information Literacy**

Assoc in Arts - Comp Lit

Assoc in Applied Sci - Comp Lit

Assoc in Science - Comp Lit

**Request Course Transfer****Proposed For:****Student Learning Outcomes**

1. Apply data functionality in spreadsheets using Excel.

**Assessment 1**

Assessment Tool: Outcome-related practical test

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 75% of students will score 75% or higher on practical exam.

Who will score and analyze the data: Departmental faculty

2. Create and edit advanced formulas and functions using Excel.

**Assessment 1**

Assessment Tool: Outcome-related practical test

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 75% of students will score 75% or higher on practical exam.

Who will score and analyze the data: Departmental faculty

3. Manipulate data for analysis and collaboration using Excel.

**Assessment 1**

Assessment Tool: Outcome-related practical test

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 75% of students will score 75% or higher on practical exam.

Who will score and analyze the data: Departmental faculty

4. Explore and perform business and data analysis using Excel.

**Assessment 1**

Assessment Tool: Outcome-related practical test

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Rubric

Standard of success to be used for this assessment: 75% of students will score 75% or higher on practical exam.

Who will score and analyze the data: Departmental faculty

### Course Objectives

1. Create static and dynamic data consolidations.
2. Group worksheets for editing and formatting.
3. Link workbooks to consolidate data.
4. Insert illustrations, hyperlinks, and passwords in worksheets.
5. Use database functions such as DSUM and DAVERAGE.
6. Build logical functions including AND, OR, and IFS functions.
7. Use financial functions such as PV, FV, and NPV.
8. Use multiple criteria in SUMIFS, AVERAGEIFS, and COUNTIFS functions.
9. Use a template to create a workbook and save a workbook as a template.
10. Set data validation, input messages, and error alerts.
11. Set worksheet and workbook protection to manage editing.
12. Finalize a workbook for distribution by inspecting it for personal information, accessibility, and compatibility.
13. Record, save, and run a macro.
14. Create and manage scenarios for worksheet data.
15. Use external data sources.
16. Review PivotTable tools.

### New Resources for Course

#### Course Textbooks/Resources

Textbooks

Manuals

Periodicals

Software

#### Equipment/Facilities

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
<b>Faculty Preparer:</b> <i>Joyce Jenkins</i>	<i>Faculty Preparer</i>	<i>Jun 15, 2023</i>
<b>Department Chair/Area Director:</b> <i>Joyce Jenkins</i>	<i>Recommend Approval</i>	<i>Jun 15, 2023</i>
<b>Dean:</b> <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Jun 26, 2023</i>
<b>Curriculum Committee Chair:</b> <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Feb 23, 2024</i>
<b>Assessment Committee Chair:</b> <i>Jessica Hale</i>	<i>Recommend Approval</i>	<i>Feb 26, 2024</i>
<b>Vice President for Instruction:</b> <i>Brandon Tucker</i>	<i>Approve</i>	<i>Mar 13, 2024</i>

# Washtenaw Community College Comprehensive Report

## BOS 284 Spreadsheet Software Applications II Effective Term: Fall 2011

### Course Cover

**Division:** Business and Computer Technologies

**Department:** Business Office Systems

**Discipline:** Business Office Systems

**Course Number:** 284

**Org Number:** 13300

**Full Course Title:** Spreadsheet Software Applications II

**Transcript Title:** Spreadsheet Software Apps II

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** New Course

**Change Information:**

**Rationale:** The Spreadsheet Software Applications II course will expose students to a variety of advanced functions and formulas not included within the textbook.

**Proposed Start Semester:** Fall 2011

**Course Description:**

This is the second of two courses in spreadsheet applications. Advanced techniques using Microsoft Excel in the work environment will be stressed. Skills and concepts include working with named ranges and structured references, using auditing tools to analyze data, creating scenarios, creating data maps and pivot tables, creating and using macros, and using workbook protection. Group participation in solving complex formulas and functions is part of this course. This course contains material previously taught in BOS 183.

### Course Credit Hours

**Variable hours:** No

**Credits:** 3

**Lecture Hours: Instructor:** 45 **Student:** 45

**Lab: Instructor:** 0 **Student:** 0

**Clinical: Instructor:** 0 **Student:** 0

**Total Contact Hours: Instructor:** 45 **Student:** 45

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

### College-Level Reading and Writing

College-level Reading & Writing

### College-Level Math

Level 2

### Requisites

**Prerequisite**

BOS 184 minimum grade "C".

## General Education

### Request Course Transfer

Proposed For:

### Student Learning Outcomes

1. Apply data functionality such as sorting and filtering to spreadsheets.

#### **Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

2. Use advanced formulas in business oriented spreadsheets.

#### **Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

3. Manipulate data for analysis and collaboration.

#### **Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

4. Publish to Excel services on SharePoint.

#### **Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

5. Perform personal, business, and payroll bank reconciliations.

#### **Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

6. Calculate business net profit margins and analyze income statements.

**Assessment 1**

**Assessment Tool:** Practical Test

**Assessment Date:** Fall 2012

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** Random sample of 33% of all students

**How the assessment will be scored:** Answer Key

**Standard of success to be used for this assessment:** 75% of students will score 75% or higher on practical exam.

**Who will score and analyze the data:** Departmental Faculty

**Course Objectives**

1. Create a 3-D reference.

**Methods of Evaluation**

Activity or Exercise

Exams/Tests

Quizzes

**Matched Outcomes**

2. Use named ranges for navigation and formulas.

**Methods of Evaluation**

Activity or Exercise

Exams/Tests

Quizzes

**Matched Outcomes**

3. Use lookup functions.

**Methods of Evaluation**

Activity or Exercise

Exams/Tests

Quizzes

**Matched Outcomes**

4. Create worksheet templates and add validation and conditional formatting.

**Methods of Evaluation**

Activity or Exercise

Exams/Tests

Quizzes

## **Matched Outcomes**

5. Insert and manipulate form controls.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

6. Record, edit, and run a macro.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

7. Create and manage scenarios.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

8. Create dynamic data consolidation and link workbooks.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

9. Create and add comments to a shared workbook.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

10. Import Microsoft Word, text, database, and HTML files.

### **Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

### **Matched Outcomes**

11. Create filters and outlines.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

12. Build one and two variable data tables.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

13. Create PivotCharts and PivotTables.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

14. Perform bank reconciliations.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

15. Complete problems in budgeting and petty cash.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

16. Solve problems involving the purchase of merchandise which include cash discounts, trade discounts, mark-ups, and mark-downs.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

17. Compute net profit or loss.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

18. Calculate office employees' productivity.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes**

19. Calculate cost of inventory.

**Methods of Evaluation**

Activity or Exercise  
Exams/Tests  
Quizzes

**Matched Outcomes****New Resources for Course****Course Textbooks/Resources**

Textbooks  
Manuals  
Periodicals  
Software

**Equipment/Facilities****Reviewer**

**Faculty Preparer:**

**Department Chair/Area Director:**  
*Joyce Jenkins*

**Dean:** *Rosemary Wilson*

**Vice President for Instruction:** *Stuart Blacklaw*

**Action**

*Faculty Preparer*

*Recommend Approval*

*Recommend Approval*

*Approve*

**Date**

*Mar 08, 2011*

*Mar 08, 2011*

*Mar 22, 2011*

*Apr 20, 2011*