

SOUTHEAST COMMUNITY COLLEGE
BUSINESS DIVISION
Office Professional Program
Revision Date: 05-24-21

I. CATALOG DESCRIPTION

Course Number: OFFT2810
Course Title: Advanced Spreadsheet Applications
Prerequisite(s): Microsoft Integration (OFFT2720) or Microsoft Applications II (BSAD1020)

Catalog Description: Advanced spreadsheet skills needed in the workplace using Microsoft Excel. Topics covered are basic & advanced formulas, financial functions, statistical functions, what-if analysis, sorting and querying a table, extracting records from a table, PivotTable reports & charts, Scenario Manager, templates, data validation and basic macros.

Credit Hours: 3.0
Class Hours: 45
Lab Hours: 0
Total Contact Hours: 45

II. COURSE OBJECTIVES: *Course will*

- A. Review Excel features pertinent to producing documents for the office: creating and editing formulas and functions, formatting spreadsheets, using ranges and functions, and creating charts and diagrams given appropriate information.
- B. Provide students with opportunities to master advanced financial, statistical, logical, date and time, and database functions.
- C. Provide students with opportunities to master advanced formulas and functions.
- D. Provide students with opportunities to use Excel as a database.
- E. Provide students opportunities to create and use macros.
- F. Provide students opportunities to use Power Pivot, Power View, and 3D Maps.
- G. Provide students opportunities to create PivotTables/Charts, use summary functions, and work with slicers.
- H. Provide students with opportunities to create and use templates.
- I. Provide students with opportunities to use formula auditing, data validation, scenarios and scenario manager.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

- A. Student Learning Outcomes: *Students will be able to*
 - 1. Create formulas that use absolute addresses, mixed cell references, and 3D cell references.
 - 2. Create and use financial, logical, date and time, statistical, and database functions.
 - 3. Create and use range names in formulas and functions.
 - 4. Manipulate and consolidate large worksheets.
 - 5. Create a table and use Excel as a database.
 - 6. Create and use filters, criteria, and extract ranges.
 - 7. Create and use database functions such as DAVERAGE, DCOUNT, SUMIF and COUNTIF.
 - 8. Create and modify PivotTable Reports and PivotChart Reports.
 - 9. Create and use simple macros for office applications.
 - 10. Create a data model and add queries to data model.
 - 11. Create a Power View Report and format a Power View Report.
 - 12. Open the 3D Maps Window and create scenes.

- 13. Use Formula Auditing feature to find errors.
- 14. Create worksheet templates.
- 15. Use Scenarios and Scenario Manager to analyze data
- B. General Education Learning Outcomes (GELOs)
 GELO 3: Critical Thinking & Problem Solving
 Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A. Use financial functions (PMT, PV, FV, ROUND)
- B. Use IF functions and Nested IF functions.
- C. Use Lookup functions (VLOOKUP, MATCH, INDEX).
- D. Create and use Named Ranges.
- E. Use database functions (SUMIF, COUNTIF, DAVERAGE, DCOUNT)
- F. Sort, filter and extract ranges from a data table.
- G. Create charts and diagrams among sheets
- H. Work with large worksheets.
- I. Create PivotTables and reports
- J. Edit PivotTables.
- K. Change the layout and view of a PivotTable.
- L. Filter a PivotTable report.
- M. Create, use, and save simple macros.
- N. Create a data model
- O. Add queries to data model
- P. Create Power view Report
- Q. Format Power view Report
- R. Open 3D Maps and create scenes
- S. Create Scenarios and use Scenario Manager
- T. Create worksheet templates

V. INSTRUCTIONAL MATERIALS

- A. Required Text: Freund, Steven M. & Joy L. Starks. *Shelly Cashman Series Microsoft Office 365: Access 2019: Comprehensive*. Current Edition. Boston, MA. Cengage Learning, 2020.

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Lecture
- B. Discussion
- C. Application
- D. Demonstration

VII. METHODS OF EVALUATION

- A. Exams
- B. Quizzes
- C. Homework Assignments
- D. Comprehensive Accounting Programs
- E. SCC STANDARD GRADING SCALE POLICY

A+	95-100	C+	75-79
A	90-94	C	70-74
B+	85-89	D+	65-69
B	80-84	D	60-64
		F	Below 60

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Students must meet all of the following to receive a passing grade.

1. Grade Requirement: A grade of C (70 percent) is required if this course is a prerequisite for any other course(s) required to meet the graduation requirements of the student's program. If this course is not a prerequisite for any other courses required by the student's program, a grade of D (60 percent) or higher is acceptable.
2. Computer Usage: This course will use a web component to facilitate student learning and student assessment. Intermediate computer skills are necessary.
3. Additional Labs: Lab time outside of class is required to complete assigned exercises. Computer lab schedules are available at the beginning of each new quarter.