



## OFAD-180 – MS Excel Essentials and Business Math

### Technology

**Effective Term & Year:** Fall 2023  
**Course Outline Review Date:** 2028-03-01

**Program Area:** Office Administration

#### Description:

MS Excel Essentials and Business Math is designed to introduce students to the concepts and fundamentals of creating personal and business budgets using mathematical computations, formulas, functions, and graphs within spreadsheets. Students also develop skills to critically select and apply formulas and functions.

#### Program Information:

This course is required for the Office Administration Certificate.

**Delivery Methods:** Online

**Credit Type:** College of the Rockies Credits

**Credits:** 2

#### Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	60
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	
Other	

---

Total	60
-------	----

---

**Course Requisites:**

- Complete all of the following
  - Completed the following:
    - **OFAD158** – Windows, Outlook, & File Management (1)
  - OFAD 155 or current typing speed of 25 gwm.

**Flexible Assessment: Yes**

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

---

**Course Transfer Credit:**

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

---

**Textbook Resources:**

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date, the following textbooks were in use:

Shelly Cashman Series: *Microsoft Office 365, Excel 2016: Introductory*. (2017) Boston, MA: Cengage Learning

*Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.*

---

## Learning Outcomes:

Upon the successful completion of this course, students should be able to

- develop and produce mathematical outputs using the data in a worksheet;
- create a worksheet and embedded chart;
- critically select formulas and apply functions;
- create a chart for visualization of data;
- compare data scenarios to answer “what-if” questions;
- use critical thinking skills to determine various formulas;
- execute work in a timely manner and on schedule; and
- demonstrate responsibility for attendance, absenteeism, and punctuality.

---

## Course Topics:

### Mathematical Computations

- work with formulas by controlling the order of mathematical operations
- conduct mathematical computations using functions
- understand the fundamentals of loans and leases
- create worksheets to calculate car loans and mortgage payments
- learn how to summarize data in a workbook by using worksheet links to create a summary worksheet

### Creating a Worksheet and Chart

- Create a worksheet
- Enter text and numbers
- Use the AutoSum button to sum a range of cells
- Copy a cell to a range of cells using the fill handle
- Format cells in a worksheet
- Center cell contents over a series of columns
- Change a cell style
- Use the Name box to select a cell
- Add a chart to the worksheet
- Name sheet tabs
- Save and print a worksheet
- Use the AutoCalculate area to determine totals

### Formulas, Functions, Formatting, and Web Queries

- Enter formulas using the keyboard and Point mode
- Apply the AVERAGE, MAX, and MIN functions
- Verify a formula using Range Finder
- Apply a theme to a workbook
- Format numbers using percent, currency and accounting styles

- Add conditional formatting to a range of cells
- Change column width and row height
- Check the spelling of a worksheet
- Set margins, headers and footers in Page Layout View
- Preview and print worksheets

### What-If Analysis, Charting, and Working with Large Worksheets

- Rotate text in a cell
- Use the fill handle to create a series
- Copy a cell’s format to another cell using the Format Painter Button
- Copy a range of cells to a nonadjacent paste area
- Freeze column and row titles
- Copy, paste, insert, and delete cells
- Format numbers using format symbols
- Use the NOW function to display the system date
- Format the system date
- Use absolute and relative cell references in a formula
- Use the IF function to perform a logical test
- Use Goal Seek to answer what-if questions
- Copy absolute cell references
- Create a chart on a separate chart sheet
- Rearrange sheets in a workbook
- Preview and print multiple sheets
- View different parts of the worksheet through window panes

See instructor’s syllabus for the detailed outline of weekly readings, activities, and assignments.

## Evaluation and Assessments

### Assessment Type: Online

Assessment Type	% of Total Grade
Chapter Theory and Practicals	60%
Final Exam	40%
Total	100%

### Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=98	97-94	93-90	89-86	85-82	81-79	78-75	74-70			<70

Pass requirements: None

**Evaluation Notes:** A grade of “C” grants credit, but may not be sufficient as a prerequisite for sequential courses.

**Evaluation Notes Comments:**

Attendance is an important component of the course. Students are expected to complete this course within the scheduled course timeline. Failure to do so will result in an “F” grade. Extensions may be considered only if the student has demonstrated workplace appropriate responsibility for absence or delay throughout the course.

**Exam Attendance:**

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

---

**Academic Policies:**

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

---

**Course Changes:**

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.