

# MS Excel Essentials and Business Math – OFAD 180

Office Administration Program

# **Course Outline**

COURSE IMPLEMENTATION DATE: OUTLINE EFFECTIVE DATE: COURSE OUTLINE REVIEW DATE: Pre 1998 September 2023 March 2028

# **GENERAL COURSE 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:** This course is delivered online.

College of the Rockies Credits: 2.0

Hours for this course: 60 hours to be completed over 4 weeks

## Typical Structure of Instructional Hours:

| Instructional Activity             | Duration |  |  |
|------------------------------------|----------|--|--|
| Lecture Hours                      |          |  |  |
| Seminars / Tutorials               |          |  |  |
| Laboratory / Studio Hours          |          |  |  |
| Practicum / Field Experience Hours |          |  |  |
| Vocational Contact Hours           | 60       |  |  |
| Total                              | 60       |  |  |

## Practicum Hours (if applicable):

| Type of Practicum      | Duration |
|------------------------|----------|
| On-the-job Experience  | N/A      |
| Formal Work Experience | N/A      |
| Other                  | N/A      |
| Total                  |          |

Bonnie New, Instructor Diploma

Signature

#### **APPROVAL SIGNATURES:**

Department Head Joy Brown E-mail: jbrown3@cotr.bc.ca Dean of Trades and Technology Dr. Jack Moes E-mail: jmoes@cotr.bc.ca

Department Head Signature

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Valid from: September 2023 – March 2028

Education Council Approval Date

#### COURSE PREREQUISITES AND TRANSFER CREDIT:

| Prerequisites: | OFAD 158                                     |
|----------------|--|
|                | OFAD 155 or current typing speed of 25 gwam. |

Corequisites: None

## Flexible Assessment (FA):

Credit can be awarded for this course through FA

🗹 Yes 🛛 No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio or Challenge Exam. Contact an Education Advisor for more information.

**Transfer Credit:** For transfer information within British Columbia, Alberta, and other institutions, please visit <u>http://www.cotr.bc.ca/Transfer</u>.

Students should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number: ABT 181

Date changed: September 2007

## **Textbooks and Required 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* <u>https://textbook.cotr.bc.ca/</u> 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 ASSESSMENT:**

| EVALUATION AND ASSESSMENT     | % Of Total Grade |  |  |
|-------------------------------|------------------|--|--|
| Chapter Theory and Practicals | 60%              |  |  |
| Final Exam                    | <u>40%</u>       |  |  |
| Total                         | 100%             |  |  |

Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments, and use of electronic aids.

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 POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

## **COURSE GRADE:**

Course grades are assigned as follows:

| Grade           |     | A+   | А     | A-    | B+    | В     | B-    | C+    | С     | F    |
|-----------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------|
| Mark<br>(Percei | nt) | ≥ 98 | 97-94 | 93-90 | 89-86 | 85-82 | 81-79 | 78-75 | 74-70 | < 70 |

A grade of "C" grants credit, but may not be sufficient as a prerequisite for sequential courses.

## ACADEMIC POLICIES:

See <u>www.cotr.bc.ca/policies</u> for general college policies related to course activities, including grade appeals, cheating, and plagiarism.

## **COURSE CHANGES:**

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.