

DEPARTMENT OF BUSINESS AND OFFICE ADMINISTRATION

COURSE OUTLINE – Winter 2023

OA1275 (A3): EXCEL EXPERT – (1.5-0-1.5) 45 Hours for 13 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR: JANELLE MACRAE **PHONE:** 780-539-2215
OFFICE: C305 **E-MAIL:** jmacrae@NWpolytech.ca
OFFICE HOURS: Wednesday and Friday 11:30 AM – 1:00 PM

CALENDAR DESCRIPTION:

This course covers expert level concepts and techniques of Microsoft Excel through lectures, demonstrations, and hands on practical applications. Students will learn how to prepare and format a worksheet, maintain and enhance workbooks, advanced formatting, formulas and data management, and managing and integrating data. Students will be prepared to successfully challenge the Microsoft Office Specialist Excel Expert Certification Exam and attain this globally recognized certificate directly from Microsoft.

PREREQUISITE(S)/COREQUISITE:

OA1145

REQUIRED TEXT/RESOURCE MATERIALS:

Bundle: Print text and Cirrus for Benchmark Series - Microsoft Excel 365 - 2019 Edition - Level 2 - Access code card



Cirrus for Benchmark Series: Microsoft Excel 365/2019 Levels 1-2

Author(s): RUTKOSKY, ROGGENKAMP, RUTKOSKY, DAVIDSON

Edition: 0

Copyright: 2020



Details: Access Card w/Cirrus Code | 180 days | 

DELIVERY MODE(S):

Online - This type of course will be offered online. There are no set class times and students attend remotely and asynchronously.

This is a paced online course, meaning there are weekly requirements that must be met.

Students will be expected to work through class material on the MyClass course page as well as the supplementary Cirrus website.

COURSE OBJECTIVES:

The course will teach the students to:

-  Create and edit spreadsheets of varying complexity
-  Format cells, columns, and rows as well as entire workbooks in a uniform, attractive style
-  Analyze numerical data and project outcomes to make informed decisions
-  Plan, research, create, revise, and publish worksheets and workbooks to meet specific communications needs
-  Given a workplace scenario requiring a numbers based solution, assess the information requirements and then prepare the materials that achieve the goal efficiently and effectively
-  Gain MOS Excel Certification should the student choose.

LEARNING OUTCOMES:

Excel 2016 Level 2, Chapter 1 Advanced Formatting Techniques

Upon completion of this chapter you will be able to:

-  Apply conditional formatting by entering parameters for a rule
-  Create and apply a new rules for conditional formatting
-  Edit and delete conditional formatting rules
-  Apply conditional formatting using icon sets, data bars, and color scales
-  Apply conditional formatting using a formula
-  Apply conditional formatting using Quick Analysis
-  Apply fraction and scientific formatting
-  Apply special number formatting
-  Create custom number formats
-  Filter a worksheet using a custom AutoFilter
-  Filter and sort data using conditional formatting or cell attributes
-  Remove a filter from a worksheet
-  Apply an advanced filter

Excel 2016 Level 2, Chapter 2 Advanced Functions and Formulas

Upon completion of this chapter you will be able to:

-  Create and manage names for ranges of cells
-  Write formulas with the COUNTBLANK, COUNTIF, and COUNTIFS statistical functions
-  Write formulas with the AVERAGEIF and AVERAGEIFS statistical functions
-  Write formulas with the SUMIF and SUMIFS math and trigonometry functions

-  Write formulas with the VLOOKUP And HLOOKUP functions
-  Write formulas with the nested IF, AND, and OR logical functions and the IFS logical function
-  Write formulas with the ROUND math and trigonometry function
-  Expand the Formula bar to view longer formulas

Excel 2016 Level 2, Chapter 3 Working with Tables and Data Features

Upon completion of this chapter you will be able to:

-  Create a table in a worksheet
-  Expand a table to include new rows and columns
-  Add a calculated column in a table
-  Format a table by applying table styles and table style options
-  Name a table
-  Add a *Total* row to a table and formulas to sum cells
-  Sort and filter a table
-  Use Data Tools to split the contents of a cell into separate columns
-  Remove duplicate records
-  Restrict data entry by creating validation criteria
-  Convert a table to a normal range
-  Create and modify subtotals of data and select data from different outline levels
-  Group and ungroup data

Excel 2016 Level 2, Chapter 4 Summarizing and Consolidating Data

Upon completion of this chapter you will be able to:

-  Summarize data by creating formulas with range names that reference other worksheets
-  Modify the range assigned to a range name
-  Summarize data by creating 3.D references
-  Create formulas that link to cells in other worksheets or workbooks
-  Edit a link to a source workbook
-  Break a link to an external reference
-  Use the Consolidate feature to summarize data in multiple worksheets
-  Create, edit, and format a PivotTable
-  Filter a PivotTable using Slicers
-  Filter a PivotTable using Timelines
-  Create and format a PivotChart
-  Create and format Sparklines

Excel 2016 Level 2, Chapter 5 Using Data Analysis Features

Upon completion of this chapter you will be able to:

Upon completion of this chapter you will be able to:

-  Switch data arranged in columns to rows and vice versa

-  Perform a mathematical operation during a paste routine
-  Populate a cell using Goal Seek
-  Save and display various worksheet models using Scenario Manager
-  Create a scenario summary report
-  Create a one-variable data table to analyze various outcomes
-  Create a two-variable data table to analyze various outcomes
-  View relationships between cells in formulas
-  Identify Excel error codes and troubleshoot a formula using formula auditing tools
-  Circle invalid data
-  Use the Watch Window to track a value

Excel 2016 Level 2, Chapter 6 Protecting and Sharing Workbooks

Upon completion of this chapter you will be able to:

-  Add information to a workbook's properties
-  Add comments containing additional information or other notes to the reader
-  Share a workbook with other people and view other users who have the shared workbook open at the same time
-  Edit a shared workbook and resolve conflicts with changes
-  Print a history of changes made to a shared workbook
-  Stop sharing a workbook
-  Save and share a workbook using SkyDrive
-  Protect cells within a worksheet to prevent changes
-  Add a password to open a workbook
-  Track changes made to a workbook
-  Modify and resolve tracked changes

Excel 2016 Level 2, Chapter 7 Automating Repetitive Tasks and Customizing Excel

Upon completion of this chapter you will be able to:

-  Record, run, and edit a macro
-  Save a workbook containing macros as a macro-enabled workbook
-  Create a macro that is run using a shortcut key combination
-  Pin and unpin a frequently used file to the Recent Workbooks list
-  Customize the display options for Excel
-  Hide the ribbon to increase space in the work area
-  Customize the ribbon by creating a custom tab and adding buttons
-  Add and remove buttons for frequently used commands to the Quick Access toolbar
-  Create and apply custom views
-  Create and use a template
-  Customize save options for AutoRecover files

Excel 2016 Level 2, Chapter 8 Importing, Exporting, and Distributing Data

Upon completion of this chapter you will be able to:

-  Import data from an Access table, website, and text file
-  Append data from an Excel worksheet to an Access table
-  Embed and link data in an Excel worksheet to a Word document
-  Copy and paste data in an Excel worksheet to a PowerPoint presentation
-  Export data as a text file
-  Scan and remove private or confidential information from a workbook
-  Mark a workbook as final
-  Check a workbook for features incompatible with earlier versions of Excel
-  View Trust Center settings
-  Save an Excel workbook as a PDF or XPS file
-  Save an Excel worksheet as a web page

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. **Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

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|---|-----|
| Text and Cirrus Assignments | 30% |
| Unit Tests (2) | 40% |
| Microsoft Office Certification (MOS) Excel Expert ★ or Final Exam | 30% |

★NOTE: MICROSOFT OFFICE SPECIALIST (MOS) CERTIFICATION EXCEL EXPERT. All course work must be completed in order to qualify to take the MOS Certificate Exam. There is a cost component to the MOS Test. All tests can be booked with the Northwestern Polytechnic Testing Centre and payment is due prior to writing the exam. MOS exams are 50 minutes in length and students will receive a MOS Certificate from Microsoft, which is a globally recognized certification.

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

| Alpha Grade | 4-point Equivalent | Percentage Guidelines | Alpha Grade | 4-point Equivalent | Percentage Guidelines |
|-------------|--------------------|-----------------------|-------------|--------------------|-----------------------|
| A+ | 4.0 | 90-100 | C+ | 2.3 | 67-69 |
| A | 4.0 | 85-89 | C | 2.0 | 63-66 |
| A- | 3.7 | 80-84 | C- | 1.7 | 60-62 |
| B+ | 3.3 | 77-79 | D+ | 1.3 | 55-59 |
| B | 3.0 | 73-76 | D | 1.0 | 50-54 |
| B- | 2.7 | 70-72 | F | 0.0 | 00-49 |

COURSE SCHEDULE/TENTATIVE TIMELINE:

| Week | Topic | Chapters |
|---------|---|-----------|
| 1 Day 1 | Course Intro/Course Outline/MyClass Overview/Textbook Info | |
| 2 | Excel 2016 Level 2, Chapter 1 Advanced Formatting Techniques | L2C1 |
| 3 | Excel 2016 Level 2, Chapter 2 Advanced Functions and Formulas | L2C2 |
| 4 | Excel 2016 Level 2, Chapter 3 Working with Tables and Data Features | L2C3 |
| 5 | Excel 2016 Level 2, Chapter 4 Summarizing and Consolidating Data Excel 2016 Level 2 Unit 1 Test REVIEW | L2C4 |
| 6 | Excel 2016 Level 2 Unit 1 Test – two parts | Chs 1 - 4 |
| 7 | Excel 2016 Level 2, Chapter 5 Using Data Analysis Features | L2C5 |
| 8 | READING WEEK – NO CLASSES | |
| 9 | Excel 2016 Level 2, Chapter 6 Protecting and Sharing Workbooks | L2C6 |
| 10 | Excel 2016 Level 2, Chapter 7 Automating Repetitive Tasks and Customizing Excel | L2C7 |
| 11 | Excel 2016 Level 2, Chapter 8 Importing, Exporting, and Distributing Data | L2C8 |

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| 12 | March 21 – Business Conference – No Class Excel 2016 Level 2 Unit 2 Test REVIEW | Chs 5 - 8 |
| 13 | Excel 2016 Level 2 Unit 2 Test | Chs 5 - 8 |
| 14 | Review for Final Exam and/or MOS | Chs 1 - 8 |
| 15 | MOS EXAM PREPARATION or FINAL EXAM PREPARATION | ALL include |
| | MOS EXCEL CERTIFICATION EXAM AS SCHEDULED | L1 Ch 1- 8 and L2 Ch 1-8 |

STUDENT RESPONSIBILITIES:

Tests: will be written as scheduled. No rewrites will be given. If there is an excusable absence, the weighting of the missed exam will be added to the final exam weighting. Instructor must be notified prior to the test of any absence. If the absence is not excusable, a grade of 0% will be given.

DUE DATES: Work must be submitted to MyClass and Cirrus by the due date and time given. No lates will be accepted.

Students must read, understand and comply with NWP academic policies.

**Note: all Academic and Administrative policies are available at [GPRC Policies | Northwestern Polytechnic \(nwpolytech.ca\)](#)

EXAM POLICIES

Final examinations must be taken during the specified time period. Do not plan any activities during examination week.

EMAIL CORRESPONDENCE:

*All email correspondence must be sent from your Northwestern Polytechnic student email account and must be professionally formatted (i.e., subject line filled in, proper greeting, spelling, and grammar check, etc.). Emails that do not follow the above requirements will not be responded to.

TECHNOLOGY REQUIREMENTS:

You will need access to the Office 365 version of Excel for this course. NWP offers students Office 365 software for free while you are a student. To access it, follow these instructions:

- Open your preferred web browser, go to <https://portal.office.com>
- Log in
- Click Install Office > Office 365 Apps

Once the software has downloaded and installed (how quickly this happens depends on your computer and your network connection, it is a large file so it can take quite some time), open Word, Excel, or PowerPoint and enter your [student ID number]@student.gprc.ab.ca and your MyClass password when prompted to activate the software

If you already have Office 365 installed on your computer, you can go to Accounts under the File tab and sign in with your NWP student email and password to activate the license if necessary.

SOFTWARE & NETWORK REQUIREMENTS

Please see [doc.php \(nwpolytech.ca\)](http://doc.php.nwpolytech.ca) for minimum device requirements

COURSE MANAGEMENT SYSTEM

NWP uses the “myClass” (D2L) online course management system.

To access myClass (D2L), visit <https://myClass.gprc.ab.ca/>

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.