NORTHWESTERN POLYTECHNIC

DEPARTMENT OF BUSINESS AND OFFICE ADMINISTRATION

COURSE OUTLINE –Fall 2022

OA1145 (A2): EXCEL AND ACCESS CORE – 3 (3-0-1.5) 67.5 Hours for 15 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:	Monday and Wednesday 11:30 AM – 1:00 PM		

CALENDAR DESCRIPTION:

This course is intended to familiarize the student with the comprehensive use and professional application of computers in daily office activities. Students will be expected to develop a core level knowledge of Microsoft Excel and Access. This course also introduces the current operating system, computer terminology, electronic file management and business math concepts.

PREREQUISITE(S)/COREQUISITE:

None

REQUIRED TEXT/RESOURCE MATERIALS:

1) Cirrus For Benchmark Series: Microsoft Excel 365/2019 Level 1
   ISBN: 9780763895013

(Cirrus access code, digitally delivered + text -180 days)

2) Cirrus For Benchmark Series: Microsoft Access 365/2019 Level 1
   ISBN: 9780763895006

(Cirrus access code, digitally delivered + text -180 days)

DELIVERY MODE(S):

On Campus - In Person

COURSE OBJECTIVES:
- 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 communication needs
- Given a workplace scenario requiring a number-based solution, assess the information requirements and then prepare the materials that achieve the goal efficiently and effectively
- Use windows Explorer to manage and manipulate files and apply electronic file management concepts.
- Create database tables to organize business or personal records
- Modify and manage tables to ensure that data is accurate and up to date
- Perform queries to assist with decision making
- Plan, research, create, revise and publish database information to meet specific communication needs
- Given a workplace scenario requiring the reporting and analysis of data, assess the information requirements and then prepare the materials that achieve the goal efficiently and effectively

LEARNING OUTCOMES:
Upon completion of the course students will obtain the following skills:

- Business Math Review

<u>MICROSOFT EXCEL</u>
Excel Level 1, Chapter 1 Preparing the Excel Worksheet

Upon successful completion of this chapter you will be able to:

- *Identify the various elements of an excel workbook*
- *Create, save, and print a workbook*
- *Enter data in a workbook*
- *Edit data in a workbook*
- *Insert a formula using the autosum button*
- *Apply basic formatting to cells in the workbook*
- *Use the Help feature*

Excel Level 1, Chapter 2

Upon successful completion of this chapter you will be able to:

- *Write formulas with mathematical formulas*
- *Type a formula in the Formula bar*
- *Copy a formula*
- *Use the insert Function feature to insert a formula in a cell*
- *Write formulas with the AVERAGE, MAX, MIN, COUNT, NOW, and TODAY functions*
- *Create absolute and mixed cell references*

Excel Level 1, Chapter 3

Upon successful completion of this you will be able to:

- *Chance column widths*
- *Change row heights*
- *Insert rows and columns in a worksheet*
- *Delete cells, rows, and columns in a worksheet*

- *Clear data in cells*
- *Apply formatting to data cells*
- *Apply formatting to selected data using the Mini toolbar*
- *Apply a theme and customize the theme font colour*
- *Format numbers*
- *Repeat the last action*
- *Automate formatting with Format Painter*
- *Hide and unhide rows and columns*

Excel Level 1, Chapter 3

Upon successful completion of this chapter you will be able to:

- *Change worksheet margins*
- *Center a worksheet horizontally and vertically on a page*
- *Insert a page break in a worksheet*
- *Print gridlines and row and column heights*
- *Set and clear a print area*
- *Insert headers and footers*
- *Customize print jobs*
- *Complete a spelling check on a worksheet*
- *Find and replace data and cell formatting in a worksheet*
- *Sort data in cells in ascending and descending order*
- *Filter a list using Autofilter*

Excel Level 1, Chapter 5

Upon successful completion of this chapter you will be able to:

- *Create a workbook with multiple worksheets*
- *Move, copy, and paste cells within and between sheets*
- *Split a worksheet into windows and freeze frames*
- *Name a range of cells and use a range in a formula*
- *Open multiple workbooks*
- *Arrange, size, and move workbooks*
- *Copy and paste data between workbooks*
- *Link data between worksheets*

Excel Level 1, Chapter 6

Upon successful completion of this chapter you will be able to:

- *Create and rename a folder*
- *Delete workbooks and folders*
- *Copy and move workbooks within and between folders*
- *Copy and move worksheets between workbooks*
- *Maintain consistent formatting with styles*
- *Insert, modify, and remove hyperlinks*
- *Create financial forms using templates*

Excel Level 1, Chapter 7

Upon successful completion of this chapter you will be able to:

- *Create a chart with data in an Excel worksheet*
- *Size, move, edit, format, and delete charts*
- *Print a selected chart and print a worksheet containing a chart*

Change a chart location

Insert, move, size, and delete chart elements and shapes

Write formulas with the PMT and FV financial functions

Write formulas with the IF logical function

Excel Level 1, Chapter 8

Upon successful completion of this chapter you will be able to:

Insert symbols and special characters

Insert, size, move, and format images

Insert a screenshot

Draw, format, and copy shapes

Insert, format, and type text in a text box

Insert a picture image as a watermark

Insert and format SmartArt graphics

Insert and format WordArt

MICROSOFT ACCESS

Upon completion of the Access Module you will:

- Describe elements found in an electronic database.

- Find and sort data in an electronic database.

- Describe how databases can be used in records management and e-commerce.

Access Level 1, Chapter 1 Managing and Creating Tables

Upon completion of this chapter you will be able to:

Open and close objects in a database

Insert, delete, and move rows and columns in a table

Hide, unhide, freeze, and unfreeze columns

Adjust table column width

Preview and print a table

Design and create a table

Rename column headings

Insert a column name, caption, and description

Insert Quick Start fields

Assign a default value and field size

Access Level 1, Chapter 2 Creating Relationships between Tables

Upon completion of this chapter you will be able to:

Define a primary key in a table

Create a one-to-many relationship

Specify referential integrity

Print, edit, and delete relationships

Create a one-to-one relationship

View and edit a Subdatasheet

Access Level 1, Chapter 3 Performing Queries

Upon completion of this chapter you will be able to:

Design query to extract specific data from tables

Modify queries

Design queries with Or and And criteria

Use the Simple Query Wizard to create queries

- *Create a calculated field*
- *Use aggregate functions in queries*
- *Create crosstab, duplicate, and unmatched queries*

Access Level 1, Chapter 4 Creating and Modifying Tables in Design View

Upon completion of this chapter you will be able to:

- *Create a table in Design view*
- *Assign a default value*
- *Use the Input Mask Wizard and the Lookup Wizard*
- *Validate field entries*
- *Insert, move, and delete fields in Design view*
- *Insert a Total row*
- *Sort records in a table*
- *Print selected records in a table*
- *Complete a spelling check*
- *Find specific records in a table*
- *Find and replace data in records in a table*
- *Apply text formatting*
- *Use the Help feature*

Access Level 1, Chapter 5 Creating Forms

Upon completion of this chapter you will be able to:

- *Create a form using the Form button*
- *Change views in a form*
- *Print and navigate in a form*
- *Add records to and delete records from a form*
- *Create a form with a related table*
- *Customize a form*
- *Create a split form and multiple items form*
- *Create a form using the Form Wizard*

Access Level 1, Chapter 6 Creating Reports and Mailing Labels

Upon completion of this chapter you will be able to:

- *Create a report using the Report button*
- *Display a report in Print Preview*
- *Create a report with a query*
- *Format and customize a report*
- *Group and sort records in a report*
- *Create a report using the Report Wizard*
- *Create mailing labels using the Label Wizard*

Access Level 1, Chapter 7 Modifying, Filtering, and Viewing Data

Upon completion of this chapter you will be able to:

- *Filter data by selection and form*
- *Remove a filter*
- *View object dependencies*
- *Compact and repair a database*
- *Encrypt a database with a password*
- *View and customize document properties*
- *Customize the Recent tab Backstage view*
- *Save a database in an earlier version of Access*
- *Save a database object in PDF file format*

Access Level 1, Chapter 8 Exporting and Importing Data

Upon completion of this chapter you will be able to:

- *Export Access data to Excel*
- *Export Access data to Word*
- *Merge Access data with a Word document*
- *Exporting an Access object to a PDF or XPS file*
- *Import data to a new table*
- *Link data to a new table*
- *Use the Office Clipboard*

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:

Excel Assignments	15%
Excel Tests	20%
Access Assignments	15%
Access Tests	20%
COMPREHENSIVE FINAL EXAM OR Excel Specialist MOS Certification	30%
	100%

✶**NOTE: MICROSOFT OFFICE SPECIALIST (MOS) CERTIFICATION**. All course work must be completed in order to qualify to take the MOS Certificate. 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		Chapter	Lesson Plan File	Description
1	Class 1			Overview of course outline, course schedule, discuss textbook options Business Math Overview
2	Class 2	Level 1, Ch 1		Preparing an Excel Worksheet – text assignments
	Class 3	Level 1, Ch 1		Preparing an Excel Worksheet - Cirrus
3	Class 4	Level 1, Ch 2		Start Chapter 2, Inserting Formulas in a Worksheet Chapter 1 due end of class
	Class 5	Level 1, Ch 2		Inserting Formulas in a Worksheet – workday
	Class 6	Level 1, Ch 2		Chapter 2 Workday and Assignments Due
4	Class 7	Level 1, Ch 3		Formatting an Excel Worksheet
	Class 8	Level 1, Ch 4		Enhancing a Worksheet
	Class 9	Ch 3 & 4		Workday and Assignments Due
5	Class 10	Chs 1 - 4		Unit 1 TEST REVIEW
	Class 11	Level 1		Level 1, U1 TEST
	SPARE			
6	Class 13	Level 1, Ch 5		Moving Data Within and Between Workbooks
	Class 14	Level 1, Ch 6		Maintaining Workbooks
	Class 15	Ch 5 & 6		Workday and assignments due

Week		Chapter	Lesson Plan File	Description
7	Week 7 is our FALL BREAK WEEK! No Classes			
8	Class 16	Level 1, Ch 7		Creating Charts and Inserting Formulas
	Class 17	Level 1, Ch 8		Adding Visual Interest to Workbooks
	Class 18	Ch 7 & 8		Workday and assignments due
9	Class 19	Chs 5 - 8		Unit 2 TEST REVIEW
	Class 20	Level 1, U2 TEST		Level 1, U2 TEST
	SPARE			
10	Class 22	Getting Started		Intro to Access, Read: Chapter 1 Creating Database Table, start on chapter projects
	Class 23	Level 1, Ch 2		Creating Relationships Between Tables
	Class 24	Level 1, Ch 1 and 2		Workday and assignments due
11	Class 25	Level 1, Ch 3		Performing Queries
	Class 26	Level 1, Ch 4		Modifying and Managing Tables
	Class 27	Level 1, Ch 3 and 4		Workday and assignments due
12	Class 28	Level 1, Access U1		TEST REVIEW DAY
	Class 29	Level 1, Access U1		Access Level 1, U1 TEST
	SPARE			
13	Class 31	Level 1, Ch 5		Creating Forms
	Class 32	Level 1, Ch 6		Creating Reports and Mailing Labels
	Class 33	Level 1, Ch 5 and 6		Workday and assignments due

	Class 34	Level 1, Ch 7	Modifying, Filtering and Viewing Data
14	Class 35	Level 1, Ch 8	Importing and Exporting Data
	Class 36	Level 1, Ch 7 and 8	Workday and assignments due
15	Class 37	Level 1, Access U2	TEST REVIEW DAY
	Class 38	Level 1, Access U2 TEST	Level 1, U2 TEST
	Class 39	**REVIEW**	**Review of Exam Topics** - Final class

STUDENT RESPONSIBILITIES:

Tests: Excel and Access 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
https://www.nwpolytech.ca/about/administration/policies/

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 NWP 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.

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.