### SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



## **COURSE OUTLINE**

**COURSE TITLE**: SPREADSHEET MANAGEMENT

**CODE NO.**: ACC220 **SEMESTER**: THREE

PROGRAM: ACCOUNTING

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2013

APPROVED: "Colin Kirkwood" July/14

DEAN DATE

TOTAL CREDITS: 4

**PREREQUISITE(S):** ACC107; BUS140

LENGTH OF 4 HOURS/ COURSE: WEEK FOR 15

**WEEKS** 

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#### I. COURSE DESCRIPTION:

This course is designed to provide the accounting major with exposure to a comprehensive windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel 2010 for Windows and the student will use this as a tool to prepare various accounting reports and presentations which can be transferred in work commonly performed in the modern office.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Perform fundamental tasks involving the operation of a spreadsheet package, recognizing that many of the same functions are found as in other spreadsheet productions.

### Potential Elements of the Performance:

- Understand the use of spreadsheets and Excel
- Learn the parts of the Excel window
- Scroll through a worksheet and navigate between worksheets
- Create and save a workbook file
- Enter text, numbers, and dates into a worksheet
- Resize, insert, and remove columns and rows
- Select and move cell ranges
- Insert formulas and functions
- Insert, delete, move, and rename worksheets
- Work with editing tools
- Preview and print a workbook

This learning outcome will constitute approximately 10% of the course grade.

### 2. Formatting a Worksheet

- Format text, numbers, and dates
- Change font colors and fill colors
- Add fill colours and background images
- Create formulas to add, subtract, and divide values
- Add number formats
- Align, indent, and rotate cell contents

- Merge a range into a single cell
- Copy and paste functions
- Apply a built-in cell style
- Change the theme of a workbook
- Create formulas to add and subtract values
- Apply a built-in table style and select table style options
- Highlight cells with conditional formats
- Hide worksheet rows
- Define the print area, insert page breaks, and add print titles
- Enter headers and footers
- Select page margins

- 3. Working with Formulas and Functions
  - Copy formulas
  - Build formulas containing relative, absolute and mixed references
  - Review function syntax
  - Insert a function with the Insert Function dialogue box
  - Search for a function
  - Type a function directly in a cell
  - Use Autofill to fill in a formula and complete a series
  - Enter the IF logical function
  - Insert the date with the TODAY function
  - Use the PMT financial function to calculate monthly mortgage payments

This learning outcome will constitute approximately 10% of the course grade.

4. Create and enhance the representation of financial information with an Excel chart.

- Create an embedded chart
- Create and format a pie chart
- Work with chart titles and legends
- Create and format a column chart
- · Create and format a line chart
- Modify a chart data source
- Create and format a combined chart

- Create a 3D chart
- Create and format sparklines and data bars
  Create a chart sheet

5. Organize data to provide better financial information to interested users within the organization.

#### Potential Elements of the Performance:

- Explore a structured range of data
- Freeze rows and columns
- Plan and create an Excel table
- Rename and format an Excel table
- Add, edit, and delete records in an Excel table
- Sort data
- Filter data
- Insert a Total row to summarize an Excel table
- Split a worksheet into two panes
- Insert subtotals into a range of data
- Use the Outlines buttons to show and hide details
- Create and modify a Pivot Table
- Apply Pivot Table styles and formatting
- Filter and sort a Pivot Table
- Insert a slicer to filter a Pivot Table
- Group Pivot Table items
- Create a Pivot Chart

This learning outcome will constitute approximately 10% of the course grade.

6. Managing Multiple Worksheets and Workbooks

- Create a worksheet group
- Format and edit multiple worksheets at once
- Create cell references to other worksheets
- Consolidate information from multiple worksheets using 3D references
- Create and print a worksheet group
- Create a link to data in another workbook
- Create a workbook reference

- Learn how to edit links
- Create and use an excel workspace
- Insert a hyperlink in a cell
- Create a sample template

7. Using Advanced Functions and Conditional Formatting

### Potential Elements of the Performance:

- Use the IF function
- Use the AND function
- Use the OR function
- Use structured references in formulas
- Nest the IF function
- Use the VLOOKUP function
- Review the HLOOKUP function
- Use the IFERROR function
- Use the conditional formatting to highlight duplicate values
- Summarize data using the COUNTIF, SUMIF, and AVERAGEIF functions

This learning outcome will constitute approximately 10% of the course grade.

8. Developing an Excel Application

- Create an application
- Create, edit, and delete defined names for cells and ranges
- Paste a list of defined names for documentation
- Use defined names in formulas
- Add defined names in existing formulas
- Create validation rules for data entry
- Protect the contents of worksheets and workbooks
- Add, edit, and delete comments
- Learn about macro viruses and Excel security features
- Add the Developer tab to the Ribbon
- Create and run a macro
- Assign a macro to a keyboard shortcut and a button
- Save and open a workbook in macro-enabled format
- Minimize the Ribbon

9. Working with Financial Tools and Functions

## Potential Elements of the Performance:

- Work with financial functions to analyze loans and investments
- Create an amortization schedule
- Calculate a conditional sum
- Interpolate and extrapolate a series of values
- Calculate a depreciation schedule
- Determine a payback period
- Calculate a net present value
- Calculate an internal rate of return
- Trace a formula error to its source

This learning outcome will constitute approximately 10% of the course grade.

10. Performing What-If Analyses

## Potential Elements of the Performance:

- Explore the principles of cost-volume-profit relationships
- Perform a basic what-if analysis
- Use goal seek to calculate a solution
- Create a one-variable data table
- Create a two-variable data table
- Create and apply different Excel scenarios
- Generate a scenario summary report
- Generate a scenario PivotTable report
- Explore the principles of price elasticity
- Run Solver to calculate optimal solutions
- Create and apply constraints to a Solver model
- Save and load a Solver model

This learning outcome will constitute approximately 10% of the course grade.

#### III. TOPICS:

- 1. Getting Started with Excel
- 2. Formatting a Worksheet
- 3. Working with Formulas and Functions
- 4. Enhancing a Workbook with Charts and Graphics Charts
- 5. Working with Excel Tables, Pivot Tables and Pivot Charts
- 6. Managing Multiple Worksheets and Workbooks
- 7. Using Advanced Functions and Conditional Formatting
- 8. Developing an Excel Application
- 9. Working with Financial Tools and Functions
- 10. Performing What-If Analyses

#### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

TEXT: "Microsoft Office Excel 2010 – Comprehensive",, Parsons / Oja / Ageloff / Carey. Course Technology Publishers

#### V. EVALUATION PROCESS/GRADING SYSTEM:

The final grade will be based on term assignment work and two, 2-hour tests as follows:

Test #1 20%

Test #2 30% includes cumulative course material

Lab/Assignments 50%

Grand Total 100%

A mark reduction penalty of 20% per day will apply to assignments not submitted by the due date.

The following semester grades will be assigned to students in post secondary courses:

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The following semester grades will be assigned to students in postsecondary courses:

		Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+	90 - 100%	4.00
Α	80 - 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been	
	awarded.	
S	Satisfactory achievement in field	
	placement or non-graded subject areas.	
U	Unsatisfactory achievement in field	
	placement or non-graded subject areas	
X	A temporary grade limited to situations	
	with extenuating circumstances giving a	
	student additional time to complete the	
	requirements for a course	
NR	Grade not reported to Registrar's office.	
	This is used to facilitate transcript	
	preparation when, for extenuating	
	circumstances, it has been impossible for	
	the faculty member to report grades.	

#### VI. SPECIAL NOTES:

#### Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

#### VII. COURSE OUTLINE ADDENDUM:

# 1. Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

# 2. Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### 3. <u>Prior Learning Assessment:</u>

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

### 4. Accessibility Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Accessibility Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

#### 5. Communication:

The College considers **Desire2Learn** (**D2L**) as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of this Learning Management System (LMS) communication tool.

### 6. Academic Dishonesty:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

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### 7. Tuition Default:

Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of November (fall semester courses), first week of March (winter semester courses) or first week of June (summer semester courses) will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

## 8. Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <a href="https://my.saultcollege.ca">https://my.saultcollege.ca</a>.

9. Recording Devices in the Classroom: Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.