SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

COURSE TITLE:	Business Ma	thematics		
CODE NO. : MODIFIED CODE:	MTH125 MTH0125		SEMESTER:	Winter
PROGRAM:	Parks and R	ecreation		
AUTHOR: MODIFIED BY:	The Mathematics Department Anthea Fazi, Learning Specialist CICE Program			
DATE:	Jan. 2012	PREVIOUS OUTLI	NE DATED:	Jan. 2011
APPROVED:		"Angelique Lemay"		Jan. 2012
		nool of Communit nterdisciplinary S		DATE
TOTAL CREDITS:	3			
PREREQUISITE(S):	None			
HOURS/WEEK:	3			
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I. COURSE DESCRIPTION:

Students will study business math concepts such as statistics, graphing, percentage applications, currency exchange, simple and compound interest, annuities, income/expense statements, balance sheets, and cash flows. Students will use these concepts in applications using spreadsheet software.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the CICE student, with the help of a Learning Specialist, will demonstrate the basic ability to:

1. Apply fractional and decimal operations with and without the use of a calculator.

This learning outcome will comprise approximately **20%** of the course.

Elements of the performance:

- understand and apply the mathematical order of operations
- read and write decimal numbers
- round decimal numbers
- add, subtract, multiply and divide decimal numbers
- determine equivalent fractions
- determine common denominators
- add, subtract, multiply and divide fractional numbers
- convert fractions to decimals
- calculate the exponent of whole numbers
- estimate and approximate results
- 2. Apply fractional and decimal equivalents to percent and vice versa.

This learning outcome will comprise approximately **20%** of the course.

Elements of the performance:

- convert decimal numbers to percentages and vice versa
- convert fractional numbers to percentages and vice versa
- determine percentages using a formula
- use fractions, decimals and percents to solve problems involving sales tax, currency conversions, commissions, increase and decrease, cash discounts, and trade discounts

3. Understand the usefulness of spreadsheet software.

This learning outcome will comprise approximately **30%** of the course.

Elements of the performance:

- use the common components of Excel spreadsheets
- use Excel to automate the concepts discussed in outcomes 1 and 2 above
- 4. Apply spreadsheet (Excel) concepts to solve business problems.

This learning outcome will comprise approximately **30%** of the course.

Elements of the performance:

- construct and interpret line graphs, bar graphs, and pie charts using Excel
- solve problems involving simple interest calculations, including finding interest, principal, or time, future values, and present values
- calculate loan repayment schedules
- determine future values and present values with compound interest
- determine future value, present value, periodic rent (payment), and term of a simple annuity
- calculate an amortization schedule for a simple annuity
- calculate and interpret simple descriptive statistics including mean, median, mode, and standard deviation
- perform using Excel a linear regression

III. TOPICS:

1.	Basic Concepts of Fractions and Decimals	(09 hours)
2.	Percentages	(09 hours)
З.	Introduction to Excel Spreadsheets	(12 hours)
4.	Business Applications with Excel	(15 hours)

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- 1. My Math Test CD from the Bookstore ISBN 0321557077 Prentice Hall Publishing
- 2. GO! With Microsoft Excel in Brief, Shelly Alicia Vargas, ISBN 013509771 Prentice Hall Publishing
- 3. Calculator: (Recommended) SHARP Calculator EL-531W. The use of some kinds of calculators and other devices may be restricted during tests.
- 4. USB storage device.
- 5. Any additional information will be provided by the instructor or be available on the Internet

V. EVALUATION PROCESS/GRADING SYSTEM:

Evaluation Methods	Weight	
Tests/Practical Tests Assignments/Quizzes	70% <u>30%</u>	
	100%	

The format and the content modification relative to exams will be proposed by the Learning Specialist and is subject to approval from the professor.

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

Grade	Definition	<u>Grade Point</u> Equivalent
A+ A	90 – 100% 80 – 89.9%	4.00
В	70 – 79.9%	3.00
C D	60 – 69.9% 50 – 59.9%	2.00 1.00
F (Fail)	Below 50%	0.00

CR (Credit) Credit for diploma requirements has been awarded.

- S Satisfactory achievement in field/clinical placement or non-graded subject area.
- U Unsatisfactory achievement in field/clinical placement or non-graded subject area.
- 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.
- W Student has withdrawn from the course without academic penalty.

VI. OTHER EVALUATION CONSIDERATIONS

- 1. In order to pass this course the student must obtain an overall test/quiz average of **50%** or better, as well as, an overall assignment average of **50%** or better. A student who is not present to write a particular test/quiz, and does not notify the professor beforehand of their intended absence, may be subject to a zero grade on that test/quiz.
- 2. Assignments must be submitted by the due date according to the specifications of the professor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the professor in cases where there were extenuating circumstances.
- 3. Any assignment/projects submissions, deemed to be copied, will result in a **zero** grade being assigned to **all** students involved in that particular incident.
- 4. It is the responsibility of the student to ask the professor to clarify any assignment requirements.
- 5. The professor reserves the right to modify the assessment process to meet any changing needs of the class.

VII. SPECIAL NOTES:

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.

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.

Prior Learning Assessment:

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.

Disability 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 Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Communication:

The College considers **WebCT/LMS** 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 the **Learning Management System** communication tool.

The professor reserves the right to use other tools and/or techniques that may be more applicable. These other tools and/or techniques for effective communication will be discussed, identified and presented throughout the delivery of the course content.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code* of *Conduct.* A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

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. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to <u>https://my.saultcollege.ca</u>.

Electronic 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.

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. *It is the departmental policy that once the classroom door has enclosed, the learning process has begun. Late arrivers may not be granted admission to the room.*

CICE Modifications:

Preparation and Participation

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.