### SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



#### **COURSE OUTLINE**

**COURSE TITLE:** Business Mathematics

CODE NO.: MTH125-3 SEMESTER: TWO

**PROGRAM:** Parks and Recreation

**AUTHOR:** The Mathematics Department

DATE: Dec. 2006 PREVIOUS OUTLINE DATED: Jan

2006

**APPROVED:** 

DEAN DATE

TOTAL CREDITS: 3

PREREQUISITE(S): none

HOURS/WEEK: 3

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For additional information, please contact C. Kirkwood, Dean
School of Technology, Skilled Trades & Natural Resources
(705) 759-2554, Ext.2688

#### 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 student will demonstrate the ability to:

- 1. Basic use of special calculator features
- 2. Concept of percents as a fraction
- 3. Determine percentages using a formula
- Apply fractions, decimals, and percents to problems involving sales tax, currency conversions, commissions, increase and decrease, cash discounts, and trade discounts
- Interpret and construct line graphs, bar graphs, and pie charts using Excel
- 6. Solve problems involving simple interest calculations, including finding interest, principal, or time, future values, and present values
- 7. Calculate loan repayment schedules
- 8. Determine future values and present values with compound interest
- 9. Determine future value, present value, periodic rent (payment), and term of a simple annuity
- 10. Calculate an amortization schedule for a simple annuity
- 11. Calculate and interpret simple descriptive statistics including mean, median, mode, and standard deviation
- 12. Perform using Excel a linear regression

#### III. TOPICS:

- 1. Introduction to Excel Spreadsheet Program
- 2. Basic Concepts
- 3. Percent
- 4. Simple Interest
- 5. Compound Interest
- 7. Annuities
- 8. Statistics and Graphing

# IV. REQUIRED RESOURCES/TEXTS/MATERIALS: personal diskette, Sharp EL 531 W Calculator

# V. EVALUATION PROCESS/GRADING SYSTEM:

Two tests each with a value of 20% of the final grade. There will be 10 computer based assignments, each worth 6% of final grade. Assignments will not be accepted late

The following semester grades will be assigned to students:

		Grade Point
Grade	<u>Definition</u>	Equivalent
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 /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. SPECIAL NOTES:

#### Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 703 so that support services can be arranged for you.

# 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.

#### Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. 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.

#### 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.

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

<include any other special notes appropriate to your course>

#### VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

# VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.