## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# SAULT STE. MARIE, ONTARIO



### COURSE OUTLINE

COURSE TITLE:	Applied Reso	ource Calculations		
CODE NO. :	MTH107-3		SEMESTER:	One
PROGRAM:	Forestry, Fish and Wildlife, Parks and Recreation			
AUTHOR:	J. Sufady			
DATE:	May 2004	PREVIOUS OUT	LINE DATED:	August 2003
APPROVED:				2003
		DEAN		DATE
TOTAL CREDITS:	3	DEAN		DATE
PREREQUISITE(S):	None			
HOURS/WEEK:	3			
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#### I. COURSE DESCRIPTION:

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

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

- 1. Convert between the Metric, Imperial and the U.S. systems of measurement using dimensional analysis
- 2. Determine the area and perimeter of a circle, a triangle, a quadrilateral, and a trapezoid
  - Use the pythagorean theorem to solve right angled triangles
- 3. Determine the surface area and volume of:
  - A rectangular prism
  - A triangular prism
  - A cylinder, cone, sphere and pyramids
- 4. Add, subtract, multiply and divide algebraic expressions
  - Solve linear equations
  - Add, subtract ,multiply and divide fractional algebraic expressions
  - Solve fractional equations
- 5. Solve worded problems involving ratio, proportion and variation
- 6. Convert decimals into fractions and percent and vice versa

#### III. TOPICS:

- 1. Estimation, Dimensional Analysis, and the Metric, Imperial and U.S. System of measurement Chapters 3 and 4
- 2. Plane Geometry Chapter 13
- 3. Solid Geometry Chapter 14
- 4. Algebra Review Chapters 6,7, 8,9,17
- 5. Factoring Chapter 16
- 6. Ratio, proportion and Variation Chapter 26
- 7. Per cent Chapter 5

# IV. REQUIRED RESOURCES/TEXTS/MATERIALS :Introductory Algebra and Trigonometry with Applications by P. Calter and C.F. Rogers

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

Test One : Topics 1,2,3 Test Two: Topics 4,5 Test Three: Topics 6,7 Final grade will be a weighted average of these three tests

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent	
A+	90 – 100%	2 4 00	
А	80 - 89%		
В	70 - 79%	3.00	
С	60 - 69%	2.00	
D	50 – 59%	1.00	
F (Fail)	49% and below	0.00	
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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.
Х	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.

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#### 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.

#### 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.