SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Applied Resource Calculations

CODE NO.: MTH107-3 SEMESTER: One

PROGRAM: Forestry, Fish and Wildlife, Parks and Recreation

AUTHOR: J. Sufady

DATE: May 2004 **PREVIOUS OUTLINE DATED:** August

2003

APPROVED:

DEAN DATE

TOTAL CREDITS: 3

PREREQUISITE(S): None

HOURS/WEEK: 3

Copyright ©2003 The Sault College of Applied Arts & Technology

Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.

For additional information, please contact C. Kirkwood, Dean
School of Technology, Skilled Trades & Natural Resources

(705) 759-2554, Ext.688

I. COURSE DESCRIPTION:

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

- Convert between the Metric, Imperial and the U.S. systems of measurement using dimensional analysis
- 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:

- 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	<u>Definition</u>	Grade Point Equivalent
A+ A	90 – 100% 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	
X	field/clinical placement or non-graded subject area. A temporary grade limited to situations with extenuating circumstances giving a	
NR W	student additional time to complete the requirements for a course. Grade not reported to Registrar's office. 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.

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.