

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



**SAULT
COLLEGE**

COURSE OUTLINE

COURSE TITLE:	Calculus		
CODE NO. :	MTH 626	SEMESTER:	Four
PROGRAM:	Aviation (Flight)		
AUTHOR:	Math Department		
DATE:	May 2012	PREVIOUS OUTLINE DATED:	May 2011
APPROVED:	"Brian Punch"		Jun 13/12
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	Chair		DATE
TOTAL CREDITS:	4		
PREREQUISITE(S):	MTH 613		
HOURS/WEEK:	4		

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For additional information, please contact
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I. COURSE DESCRIPTION:

This course provides the student with a more advanced study of calculus. Topics of study include techniques and applications of integration, trigonometric identities, and differentiation of transcendental functions with an emphasis on applications.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. integrate various functions with applications
2. differentiate transcendental functions with applications
3. recognize and use trig identities

III. TOPICS:

1. **Applications of Integration: Ch. 26 Sec. 1, 2, 3, 6**
2. **Additional Topics in Trigonometry: Ch. 20**
3. **Differentiation of the Transcendental Functions: Ch. 27**
4. **Techniques of Integration: Ch. 28 Sec. 1-6**
5. **Basic Number Systems: in class handouts**

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

3

1. Basic Technical Mathematics, Allyn J. Washington. Ninth Edition, SI Version, with MathXL, Addison-Wesley
2. Calculator: any scientific calculator.
The use of some types of calculators will be restricted during tests.

4.

V.

EVALUATION PROCESS/GRADING SYSTEM:**MAJOR ASSIGNMENTS AND TESTS:**

While regular tests will normally be scheduled and announced beforehand, there may be an unannounced test on current work at any time. Such tests, at the discretion of the instructor, may be used for up to **30%** of the overall mark.

At the discretion of the instructor, there may be a mid-term exam and/or there may be a final exam, each of which can contribute up to **30%** of the overall mark.

The instructor will provide you with a list of test dates. Tests may be scheduled out of regular class time.

Unexcused absence from a test may result in a mark of zero ("0").

Absence may be excused on compassionate grounds such as verified illness or bereavement. On return from an excused absence, you should ask your instructor to schedule the writing of a make-up test. Failure to do so will be considered as an unexcused absence.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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:

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:

The provisions contained in the addendum located on the portal, form part of this course outline.