

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 2016	PREVIOUS OUTLINE DATED:	May 2015
APPROVED:		"Colin Kirkwood"	June 2015
		_____	_____
		Dean	DATE
TOTAL CREDITS:	4		
PREREQUISITE(S):	MTH 613		
HOURS/WEEK:	4		

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For additional information, please contact
Colin Kirkwood, Dean, School of Environment, Technology, and Business
(705) 759-2554, Ext. 2688

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**

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. Basic Technical Mathematics with Calculus, SI Version plus MyMathLab with Pearson e Text—Access Card Package, 10/e Washington and Boue, Pearson

1. Calculator: any scientific calculator.
The use of some types of calculators will be restricted during tests.

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 **60%** of the overall mark.

Assignments will be given out for each unit and there may be some in class quizzes at the discretion of the instructor. These may be used for up to **30%**.

Attendance and in class participation will be given a mark of **10%**.

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%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	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:

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:

1. Course Outline Amendments:

The faculty member reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

2. 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.

3. Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the academic assistant or program coordinator (or the course coordinator regarding a general education transfer request). Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Key Dates Calendar for the deadline date by which the application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio. Staff in the Testing Centre (G1800) can provide information regarding the Prior Learning Assessment and Recognition policy or it can be viewed on the Student Portal.

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

4. 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, record of achievement, unofficial transcript, and outstanding obligations. In addition announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more is available. Go to <https://my.saultcollege.ca>.

5. Communication:
The College considers **Desire2Learn (D2L)** 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 this Learning Management System (LMS) communication tool.

6. Accessibility Services:
Students who have a temporary or permanent disability or a suspected disability requiring academic accommodations are required to register with the Accessibility Services Office as early in the admission process as possible. Students will meet with an Accessibility Counsellor to review accommodation needs based on functional limitations impacting their academics. All information provided to the Accessibility Services Office is kept confidential, and records are not included in any other office within the College. The Student Accommodation Policy, along with other Accessibility Services policies and forms, are available on the Student Portal. (Contact staff in A0170 or studentsupport@saultcollege.ca)

7. Audio and Video Recording 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. Students with disabilities who require audio or visual recording devices in the classroom as an accommodation will receive approval from their counsellor once the Audio and Video Recording Devices in the Classroom Policy has been reviewed by the student. Recorded classroom instruction will be used only for individual academic use and will not be used for any other purpose. Recordings may only be used for individual study of materials presented during class and may not be published or distributed. Intentional misuse of audio and video recordings or intentional misrepresentation when requesting the use of a device for recording shall constitute a violation of this policy and laws protecting intellectual property.

8. Academic Dishonesty:

Students should refer to the definition of “academic dishonesty” in the *Student Code of Conduct*. Students who engage in academic dishonesty will be issued a sanction under the Student Code of Conduct which could lead to and include expulsion from the course/program. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, students must use a documentation format for referencing source material.

9. Tuition Default:

Students who have defaulted on the payment of tuition) as of the first week of November (fall semester courses), first week of March (winter semester courses) or first week of June (summer semester courses) will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.