



SAGINAW CHIPPEWA TRIBAL COLLEGE

Master Course Outline

MTH 145 (MTH)

CALCULUS I

5 CREDITS

I. Course Description: Students will continue study completed in MTH 140 (Pre-Calculus) by more in-depth coverage of topics including limits, continuity, differentiation of algebraic and trigonometric functions, applications of derivatives, fundamental integration, exponential and logarithmic functions.

II. Pre-requisites/Co-requisites: A grade of “C” or better in MTH 140.

III. Textbook(s)/Materials:

IV. Institutional Learning Outcomes: Upon graduating from SCTC, our students will be able to:

Communication

Communicate clearly and effectively through listening, speaking, writing, reading, and other modes of communication;

Critical Thinking

Use literacy and numeracy skills; gather and synthesize relevant information, evaluate alternatives, and implement creative and effective solutions;

Cultural Awareness & Appreciation

Demonstrate awareness and appreciation for diverse perspectives through inquiry of cultural, political, social, and environmental issues comparing and contrasting global views with the Anishanaabe culture.

V. Student Learning Outcomes: Upon completion of this course, students will be able to:

Communication

1. Interpret and communicate mathematical results from models in a clear, accurate and professional manner
2. Use appropriate vocabulary and notation; state definitions and theorems accurately

Critical Thinking

1. Solve problems using differentiation and integration of single- and multi-variable calculus

2. Analyze the results of modeling data and contrast interpolative and extrapolative barriers to their application
3. Classify and identify different problem types in calculus and select suitable problem solving techniques
4. Identify types of equations and sketch their related graphs
5. Perform simple algebraic and trigonometric integration and interpret the results

Cultural Awareness & Appreciation

1. Differentiate relationships among different topics in mathematics and use learned strategies to solve a wide variety of problems

VI. Instructional Methodology: Course may provide various instructional approaches including individual and group work, presentations, lectures, discussions, critiques, etc.

VII. Customary Methods of Assessment: Instructors may use common and/or discretionary methods such as projects, presentations, papers, tests, discussion boards, class participation, e-Portfolio inclusions, etc. to assess student learning.

Standard Grading Scale: Grades will be given as letter grades. Letter grades and numerical equivalents are given below.

95 – 100% A	80 – 82% B-	66 – 69% D+
90 – 94% A-	76 – 79% C+	63 – 65% D
86 – 89% B+	73 – 75% C	60 – 62% D-
83 – 85% B	70 – 72% C-	59 & below F

Instructor Grading Scale:

VIII. SCTC Attendance Policy: Students are expected to attend all classes for which they are registered. A student who is absent from a class misses a portion of the subject matter of the course and misses an opportunity to contribute to class. Each student is responsible for all coursework missed, regardless of the reason. Prolonged absence from class may result in a loss of financial aid and usually results in a reduction of grade. Attendance requirements may vary from instructor to instructor. Student travel for college related events is a privilege, not an entitlement. Students wishing to go on field trips or overnight travel must make arrangements with each of their instructors at least two weeks in advance. Travel status does not excuse students from due dates and other course requirements. Permission for student travel is at the discretion of each instructor (see current *SCTC Student Handbook/Catalog*).

Instructor Attendance Policy:

- IX. SCTC Plagiarism Policy:** (Adopted with permission from Indiana University, Bloomington, IN, December 8, 2009). Plagiarism is a violation of the Student Code of Conduct described in the current *SCTC Student Handbook*. Such a violation may result in failure of the assignment, failure of the course, and suspension or expulsion from the college.
- X. Specific Course Policies:**
- XI. Available Support:** SCTC offers tutoring services through Student Services Department. Additional support services may be available. Please contact your instructor, an SCTC staff member, or the Dean of Students Services for more information.
- XII. Notification of Services for Students with Disabilities:** Students wishing to request accommodations due to a disability must contact the Dean of Student Services at 989-317-4760 and provide documentation of the need for accommodation.
- XIII. Equal Opportunity and Nondiscrimination:** The Saginaw Chippewa Tribal College prohibits discrimination against applicants, employees or students on the basis of race, religion, creed, color, national origin or ancestry, sex, age, height, weight, marital status, disability or handicap, sexual orientation, nor will sexual harassment be tolerated in its employment practices and/or educational programs or activities. If you have a preferred first name and/or specific gender pronoun you would like used during class, please let your instructor know.
- XIV. Last Day to Withdraw with No Grade Reported:** Students that are earning an overall grade of a “C-” or less will be notified by the Dean of Students near the midterm via their sagchip.edu account. Those students should speak with the instructor regarding the feasibility of earning a passing grade. Those students who are unable/unlikely to earn a passing grade are advised to withdraw from the course. Withdrawal from a course is a student responsibility. Contact the Registrar for the appropriate form. Please check the academic calendar on our website for the last day to withdraw from this course.

XV. Student E-Mail/Schoology Responsibility: Students will receive notification regarding class cancellations, midterm grade warnings, and other important course/school information via their sagchip.edu email and/or Schoology (SCTC's Learning Management System) **ONLY**. It is the student's responsibility to monitor and maintain their student email/Schoology account. Sagchip.edu email accounts and Schoology log-ins will be set up at the beginning of each semester. For more information, see the Technology Guide in your registration packet. You may also email techsupport@sagchip.edu for technical assistance.

XVI. Other:

*Note: The e-Portfolio component is an electronic collection of "artifacts" which should demonstrate a student's academic and personal growth during their education at SCTC. Artifacts are defined as accomplishments made towards achieving the goals and learning outcomes in the student's declared degree. Every student is ***required*** to create an e-Portfolio during their first two semesters at SCTC and then develop and maintain it until it is assessed during the semester in which they graduate. This project will also enable the student to track his/her progress in meeting goals and reflect on accomplishments in a manner that will support synthesis of knowledge, values, and skills essential for an SCTC graduate.

It is the student's responsibility to accumulate and choose which artifacts will be submitted into his or her portfolio. It is suggested that students work with their instructor for guidance on inclusions which ***must*** contain coursework but may also include co-curricular and/or extracurricular endeavors. The following is a non-exhaustive list of examples: academic papers, projects, presentations, exams, lab reports, pieces of art work, awards, and instances of community service, club/organization activities, and attendance at conferences.

XVII. Tentative Course Schedule and Outline:

*****Syllabus subject to change***