



## SAGINAW CHIPPEWA TRIBAL COLLEGE

### Master Course Outline

**PHY 101 (SCI)**

**GENERAL PHYSICS**

**3 CREDITS**

**I. Course Description:** Fundamental principles of mechanics, heat, electricity, magnetism, sound, optics, and modern physics. Lab periods will include mechanics, heat, wave motion, conservation of energy and momentum, gravitation, gas laws, and laws of thermodynamics. This course fulfills the General Education Science Requirement. This class must be taken concurrently with PHY 101A (lab).

**II. Pre-requisites/Co-requisites:** PHY101A

**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. Describe alternative energy sources and energy conservation
2. Use well-functioning group communication and problem solving skills when working with others in a laboratory setting
3. Explain Newton's Laws of Motion and Gravitation

*Critical Thinking*

1. Collect, analyze and use qualitative and quantitative data while conducting scientific investigations and "real world" applications

2. Apply principles of scientific inquiry including differentiating between a hypothesis and fact from opinion
3. Analyze elementary motion situations involving elements such as constant acceleration and uniform circular motion
4. Explore natural occurrences involving light particles and wave nature of light

*Cultural Awareness & Appreciation*

1. Value the relationship between the natural and chemical world in relation to scientific experiments

**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 a preferred first name and/or specific gender pronoun is to be used during class, (i.e., she/her/hers or he/him/his, or alternative, non-binary pronouns such as they/them/theirs, etc.) please let the instructor know. Students may also designate a preferred first name on Schoology. From the drop-down menu and next to student name, select “Account Settings”. Type in preferred name which will appear on the class roster and grade book.
- 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](mailto:techsupport@sagchip.edu) for technical assistance.

**XVI. Other:**

**XVII. Tentative Course Schedule and Outline:**