A course syllabus is not the same as a course outline. A course syllabus outlines the general requirements for a course. A course outline is the specific document created by the individual faculty member to distribute to a specific course section. This is an “abbreviated” course syllabus because it is only collecting information on the course number, title, description, and learning outcomes. Please submit this completed form electronically to Dean Britton.

PLEASE NOTE: Any changes made to the Course Number, Title, or Catalog Description must go through the regular faculty governance process. This Expedited Process of Approval, which expires in March 2012, only pertains to approval of the Learning Outcomes. Therefore, this is NOT the form to be used to change course numbers, titles, or descriptions. This is NOT the form to use for proposing a new course. (See the Governance website for those types of proposals.)

I. **Course Number and Title:** PHY112 Technical Physics 1

II. **Catalog Description:** Acquaints students in Mechanical and Electrical Technology programs with fundamental aspects of physics. Study of Newton’s Laws of Motion and their applications, principles of conservation of energy and momentum, and rotation and rotational dynamics. (3 hrs. lecture, 2 hrs. laboratory.) Prerequisite: MAT112.

*Note: Fulfills SUNY General Education Requirement for Natural Sciences.*

III. **Learning Outcomes:** (Main concepts, principles, and skills you want students to learn from this course) The Learning Outcomes listed here should be considered the minimum core outcomes for the course. Many other learning outcomes may also be a part of the learning experience within the course.

Upon completion of this course, students will be able to:

A. Apply the laws of physics in areas of linear kinematics and dynamics, force and work/energy concepts, electricity and simple circuits, basic thermodynamics, optics and application to simple optical instruments.

B. Interpret graphical data and do linear fits.

C. Use basic algebra and trigonometry throughout the course in formulating principles and solving word problems.

D. Understand and apply concepts of vector addition and resolution.

*These statements must appear verbatim in course outlines. However, additional outcomes may be added to individual course outlines at the instructor’s discretion.*

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E. Apply critical thinking skills in analyzing multi-step word problems and formulating solutions.

F. Work as part of a team on projects involving application of the physical concepts.

G. Work in a technical setting such as a laboratory and be able to present findings in a coherent report.

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Name of Discipline Lead: Glenda Denicó

Discipline Vote:
For 3 Against 0 Abstention 0

Date of Vote: 03/02/2010

_(Initial and Date)_________ Certification of Vote by AVP of Academic Affairs

_(Initial and Date)_________ Certification of Vote by College Curriculum Chair

*These statements must appear verbatim in course outlines. However, additional outcomes may be added to individual course outlines at the instructor’s discretion.

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