

North Hennepin Community College

PHYS 1990: Topics:

A. COURSE DESCRIPTION

Credits: 1,2,3,4

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites:

MATH 1150 - College Algebra (Minimum grade: 1.67 GPA equivalent); OR

MATH 1180 - College Algebra and Pre-Calculus (Minimum grade: 1.67 GPA equivalent)

Corequisites: None

MnTC Goals: None

In this class, we will introduce topics in astronomy and apply physical laws to them. Topics include orbits, planets, light, relativity, stars, black holes, galaxies, and cosmology.

For example, once black holes are introduced, you will be able to relate their mass to their Schwarzschild radii and how the of time changes near them. Once fusion is introduced, you'll be able to determine the energy given off by different fusion reactions and relate them to the luminosities of stars. For orbits, we will use computer simulations to study the effect of different arrangements and conditions.

A previous class in physics or astronomy is strongly recommended.

This course will provide flexibility in offering an in-depth review of topics of immediate importance and topical interest. These topics will go beyond the introductory courses in examining specific aspects of the subject matter.

B. COURSE EFFECTIVE DATES: 08/26/2004 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

None

D. LEARNING OUTCOMES (General)

None

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted