## Master Syllabus Department of Physics and Astronomy



# PHYC 469 Immersion Experiences Related to Physics and Astronomy

#### **Course Description**

Student teams will design and complete a project related to physics and/or astronomy which creates a tangible outcome. Team activities will be multifunctional and multidisciplinary. Students must form a project team and prepare a project outline prior to requesting permission from the department chairperson to enroll in the course.

#### **Course Objectives**

Work independently to contribute to a group project.

Work as a member of a team to plan, execute and complete a group project which is interdisciplinary in nature.

Interface with individuals outside the university.

#### **Course Rationale**

This course provides opportunities for student-centered group activities which are interdisciplinary in nature and which require teamwork and organizational skills and involve contact beyond the university. Such experiences are very helpful as students make the transition from the more externally controlled university environment and become active participants in more diverse organizations in business, industry or academia. This course will provide experiences which are more commonly experienced in professional fields of modern society.

## Course Content, Format, and Bibliography

## Content

To be determined by the interdisciplinary team with assistance from the faculty advisor.

#### Format

Students will form interdisciplinary groups. Group formation may be assisted by the department chairperson or his/her designee. Students will construct a plan to complete a project during an academic term. The plan will identify tasks to be completed, a product to be produced, a timeline for execution and a specific plan for student performance assessment. The project will be discussed with and approved by the department chairperson or his/her designee prior to registration in the course. The departmentally approved student-centered project will be completed as planned or modified as appropriate.

This course is taught as a dual undergraduate/graduate course. Students will be required to complete activities appropriate for the level of the course in which they are enrolled. Student performance on homework, exams and/or labs will be evaluated using different standards for undergraduate and graduate students.

# www.bsu.edu/physics

## Bibliography

"Surviving the Group Project: A Note on Working in Teams," <u>http://web.cba.neu.edu/~ewertheim/teams/ovrvw2.htm</u>

"Manual for Working in Teams," http://www.analytictech.com/mb021/teamhint.htm

"Working on Teams," http://web.mit.edu/hr/oed/learn/teams/

www.bsu.edu/physics