

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

**Course Outline**

Course Title: Astronomy: The Universe  
Semester Course Prefix and Number: PHYS 1566  
Old Quarter Course Prefix and Number: PHYS 133

Submitted By: M. Threapleton  
Approval Date:  
Revision Date: Feb. 2002

Number of Credits: 2                      Number of Lecture Credits: 2  
Semester(s) Offered:  
Negotiated Class Size:                      Number of Lab Credits:                      Number of Lab Hours:  
Number of Studio/Demonstration/Internship Credits:

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**Course Purpose Code:**

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of general education (MNTC) e.g. computer science, health, physical education
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

**Catalog Description:**

This course is a non-mathematical study of the Universe outside the Solar System. Properties of different stars, galaxies, neutron stars, black holes, evolution of the Universe are covered in this course.

**Prerequisites and/or recommended entry skills/knowledge:**

Course Prerequisite(s): None  
Reading Prerequisite: None  
Composition Prerequisite: None  
Mathematics Prerequisite: None

**Career Programs and Transfer Majors Accessing this Course:**

**Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:** Notes: No more than two goals may be met by any one course. (Curriculum Committee review and the Chief Academic Officer's approval are required).

- 0.  None
- 1.  Communications
- 2.  Critical Thinking
- 3.  Natural Sciences
- 4.  Mathematical/Logical Reasoning
- 5.  History and the Social and Behavioral Sciences
- 6.  The Humanities and Fine Arts
- 7.  Human Diversity
- 8.  Global Perspectives
- 9.  Ethical and Civic Responsibility
- 10.  People and the Environment

**Learning outcomes, including any relevant competencies listed in the Minnesota Transfer Curriculum:**

- A study of the structure of the universe outside the solar system
- Use of the principles of Physics to describe and interpret the data coming to earth
- Used for satisfying the non-lab science requirement.

**Student assessment methods:**

Two one-hour multiple-choice tests

**Use of instructional technology** (includes software, interactive video and other instructional technologies):

Astronomy videos

**Outline of the major course content:**

- A nonmathematical study of the Universe outside the Solar System
- Properties of different stars, galaxies, neutron stars, black holes, evolution of the Universe.

**Additional special information** (special fees, directives on hazardous materials, etc.)

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Approvals:**

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Meet and Confer		
Chief Academic Officer		

Distribution: Original – Administrative Office, Library, Learning Center, Records, Student Services, Curriculum Committee Chair