## COLLIN COLLEGE

## COURSE SYLLABUS

Course Information

Course Number: PHYS 1404

Course Title: Solar System

**Course Description:** Introduction to the solar system; basic tools and concepts in astronomy and physics are discussed. Subjects studied include planets, moons, asteroids, comets, solar system formation, and solar system exploration. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required.

## Course Credit Hours: 4

- Lecture Hours: 3
  - Lab Hours: 3
- **Prerequisite:** Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent
- **Student Learning Outcomes:** Upon successful completion of this course, students should be able to do the following:
  - 1. Answer questions involving basic principles of astronomy.
  - 2. Answer questions involving basic concepts of light and spectra.
  - 3. Explain the role of telescopes in astronomical observations.
  - 4. Explain the basic properties and formation of the solar system.
  - 5. Describe the structure and environment of the rocky, inner planets. (Critical Thinking; Communication Skills)
  - 6. Compare and contrast the properties of the gas giants with the inner planets.
  - 7. Explain the basic properties of icy moons and other bodies in the outer solar system. (Empirical/Quantitative)
  - 8. Demonstrate the collection, analysis, and reporting of data using the scientific method while working as a contributing member of a group (Teamwork)

Withdrawal Policy: See the current Collin Registration Guide for last day to withdraw.

Collin College Academic Policies: See the current Collin Student Handbook.

Americans with Disabilities Act Statement: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.