

Warren County School District

PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Science 6 Elective (Astronomy and Space Science)

Course Number: 00300

Course Prerequisites: None

Course Description:

Astronomy and Space Science is a one semester elective designed for sixth grade students. It will reinforce the middle level Earth science standards. Students will examine how the earth is part of a larger system in the universe. Students will learn how the sun and moon affect the earth as well as our solar system and the stars and galaxies that lay beyond it. Students will learn how scientists study such large and distant expanses of our universe.

Suggested Grade Level: Sixth Grade

Length of Course: ☒ One Semester ☐ Two Semesters ☐ Other (Describe)

Units of Credit: .5 Middle Level Credit (Insert *None* if appropriate)

PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:
CSPG Middle Level Science, Earth Science, General Science, Elementary

Certification verified by WCSD Human Resources Department: ☒ Yes ☐ No

TEXTBOOK AND SUPPLEMENTAL MATERIALS

Continue using Board approved textbook? ☒ Yes ☐ No (If yes, then complete the information below.)

Board Approved Textbooks, Software, Supplemental Materials:

Title: Earth and Space Science

Publisher: McGrawHill

ISBN #: 978-0-07-677385-5

Copyright Date: 2017

NASA: http://coolcosmos.ipac.caltech.edu/education_resources

Date of WCSD Board Approval: 3/12/2018

BOARD APPROVAL:

Date Written: 2/14/18

Date Approved: 3/12/2018; March 11, 2019 Revised Credit

Implementation Date: 2018-2019

SPECIAL EDUCATION AND GIFTED REQUIREMENTS

The teacher shall make appropriate modification to instruction and assessment based on a student's Individual Education Plan (IEP) or Gifted Individual Education Plan (GIEP).

COURSE OVERVIEW

(List the content to be taught)

- I. Exploring space
 - a. Observing the Universe
 - b. Early history of space exploration
 - c. Recent and Future space missions
- II. The Sun-Earth-Moon system
 - a. Earth's Motion
 - b. Earth's Moon
 - c. Eclipses and Tides
- III. The Solar System
 - a. The structure of the solar system
 - b. The inner planets
 - c. The outer planets
 - d. Dwarf planets and Other projects
- IV. Stars and Galaxies
 - a. The view from Earth
 - b. The Sun and Other Stars
 - c. Evolution of Stars
 - d. Galaxies and Universe

ANCHORS AND STANDARDS

S8.D.3.1 Explain the relationships between and among the objects of our solar system.

Standard - 3.3.8.B3

- Compare and contrast scientific theories.
- Know that both direct and indirect observations are used by scientists to study the natural world and universe.
- Identify questions and concepts that guide scientific investigations.
- Formulate and revise explanations and models using logic and evidence.
- Recognize and analyze alternative explanations and models.
- Explain the importance of accuracy and precision in making valid measurements.

Standard - 3.3.8.B1

Explain how light, measured remotely, can be used to classify objects in the universe.

Standard - 3.3.8.B2

Scale and measurement

Explain measurements and evidence indicating the age of the universe.

ASSESSMENT

Portfolio Assessment: _____ Yes X No

District-Wide Common Final Examination Required: _____ Yes X No

Course Challenge Assessment (Describe): None

WRITING TEAM: Warren County School District Teachers

WCSD STUDENT DATA SYSTEM INFORMATION

1. Is there a required final examination? _____ Yes X No

**Warren County School District Policy 9741 and 9744 state, "All classes in grades 9-12 shall have a final exam."*

2. Does this course issue a mark/grade for the report card? X Yes _____ No

3. Does this course issue a Pass/Fail mark? _____ Yes X No

4. Is the course mark/grade part of the GPA calculation? X Yes _____ No

5. Is the course eligible for Honor Roll calculation? X Yes _____ No

6. What is the academic weight of the course?

_____ No weight/Non credit

 X Standard weight

_____ Enhanced weight