

## Astronomy Course Outline

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### Semester Class (0.5 credits)

This semester elective science class is designed to promote an appreciation of Astronomy. It is a survey class and will cover a broad range of topics related to Astronomy. Students will apply the Next Generation Science Standards in the areas of chemistry, physics and earth science to the astronomical concepts studied.

To begin, students will learn foundation information necessary for the study of astronomy.

These topics include:

- ❑ The difference between astronomy and astrology
- ❑ Space physics and common misconceptions
- ❑ A brief history of astronomy
- ❑ The use of the electromagnetic spectrum to explore space

Once the foundation topics have covered, students will have the opportunity to learn about some of the following topics:

- |                                |                     |                        |
|--------------------------------|---------------------|------------------------|
| * The night sky/Constellations | ☾ The Moon          | + Galaxies             |
| 🌐 Planet systems               | ✈ Space exploration | * Cosmology            |
| * Asteroids/Meteors/Comets     | * Star life cycle   | 👤 Life in the Universe |
| * Our Sun                      | ● Black Holes       |                        |

### Nature of the class:

Astronomy is a lecture and lab based class. Students will receive a majority of their material through class lecture and lab activities. As such, it is crucial to take accurate notes during class and fully participate in all discussions and activities.

### In-Class:

Students will be required to keep notes on assigned topics, and make two presentations during the semester; one based on a misconception and one based on a research assignment. Additional in-class work will be assigned based on the topic(s) of study. Tests will be given at the completion of each topic/unit; with a cumulating semester final exam.

### Homework:

In addition to reviewing notes and labs on a daily basis, homework will be assigned at least once a week and will include:

- |                  |                     |                    |
|------------------|---------------------|--------------------|
| 📖 Journaling     | 📖 Reading           | 📖 Research         |
| 📖 Current events | 📖 Review activities | 📖 Various projects |

### Materials:

Planner to serve as a bathroom pass and homework  
Writing paper, pen (only blue or black ink), and a #2 pencil  
Calculator capable of basic math functions.

**To be Successful in Astronomy:**

- ★ Acquire and complete any homework missed due to an excused absence within the number of days absent plus one. If the absence is unexcused you will receive a zero on all assignments.
- ★ Be prepared to learn: have all required material and assignments with you, and be quietly in your desk seat by the time the tardy bell rings.
- ★ Ask for clarification when you don't understand the material.
- ★ Homework and in-class assignments are completed and turn in on time. Homework is to be placed in the turn-in box at the beginning of the period. Late work will be marked-down 20% each class day; beyond this it is worth zero points.
- ★ Academic Integrity: You are responsible for putting forth the effort necessary to learn the material covered in class. Cheating of any form (giving or getting) is not tolerated, and will result in zero credit for the assignment(s).
- ★ To ensure that students designated as "Talented and Gifted" (TAG) receive academic instruction that is appropriate to their rate and level of learning, the curriculum and instruction of this course may be differentiated to include specialized groupings, compacting of curriculum, accelerated pacing, and providing of extension/challenge activities

**Community Principles:** Class Rules, Responsibilities, and Expectations

- ‡ Be involved-participate
- ✎ Respect other people's opinions and differences, no harassment
- ⊗ Treat people, school, supplies with respect and clean-up after yourself
- 👂 Listen when people are talking: don't interrupt
- 🍷 Food and drink policy: only water
- 📱 Electrical devices (other than calculators and lab equipment) are not permitted.

**Grading Weight**

Test/Quizzes	50%
Daily Work (Labs, Journal...)	35%
Homework	15%

**Grading Scale**

A = 100 – 90%
B = 89.5 – 80%
C = 79.5 – 70%
D = 69.5 – 60%
F = 59.5 – 0%

**Semester Grade based on: 40% for both quarters, and 20% for the final exam**

Please Check your grade online.

**Students may watch the following movies: Armageddon, Contact, and the Series: The Universe.**

Please Check your grade online.

I, \_\_\_\_\_, have read over and understand the content of this course outline  
(print full name)  
and will do my best in the class to achieve the highest grade that I am capable of achieving.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/guardian Signature

\_\_\_\_\_  
Date