

Middle and High School Science: Astronomy

Why on Earth should we continue to explore outer space? What's out there? What's in space, which we cannot see? Our God created it all. In this course, we will study the history of astronomy, properties of our sun, structure of stars, the Milky Way Galaxy, the moon, and many other celestial bodies in our solar system. Observing the night sky and seeing the beautiful world God has created will be an amazing journey. Get ready to enjoy virtual labs, web quests, hands-on experiments, using our telescope and nighttime activities.

Grades:	middle and high
Prerequisites:	None
Semester:	Fall (15 weeks)
Instructor's Name:	Anna Pollard
Instructor's Phone:	910-292-2288 please leave a message and I will return your call within 24 hours
Textbook:	eBook and all worksheets will be provided

Additional Supplies/Resources Needed:

1. headset, microphone, notebook, a device (such as a phone-nothing fancy) to take pictures of your experiments
2. Common household supplies such as (paperclip, scissors, soup can, water bottle, tack, rubber bands, glass jar, drinking straw, tinfoil, water, paper plate, cardboard, etc...)
3. **Please purchase** the Science First Galileo Telescope Teacher Demo Kit, if you do NOT have a telescope. [Click here to purchase telescope kit](#)

Weekly Homework: Homework will be assigned at the end of each live class session and will be due before the next live class. Homework should take approximately 2 hours per week.

HW will consist of ...

1. answering questions from the previous week's assignment
2. completing experiment/activities(s) & submitting lab notes & a picture
3. reading about the "new" topic that we will discuss in our next class

Homework Policy: The goal of homework is to reinforce and explore the concepts that were taught in class. This is a fun and active class, and you will need to keep up with assignments. Contact me if your assignments will be late. I will work with you.

Additional Policies: Students should conduct themselves appropriately with their speech and texts during our live class. Students who are unable to adhere to this type of conduct may be separated from the class or removed from the session.

Anticipated Weekly Course Schedule	
Week 1	History of astronomy, telescopes
Week 2	Observational astronomy (Earth, Moon)
Week 3	The sun
Week 4	The seasons
Week 5	The Milky Way
Week 6	Inner planets
Week 7	Outer planets
Week 8	Stars & Stellar Objects
Week 9	Constellations & the night sky
Week 10	Earth's Vital Signs
Week 11	Supernova & Black Holes
Week 12	Solar system bodies (asteroids, comets, meteors)
Week 13	Other Galaxies DSO (Deep space objects)
Week 14	Dwarf planets & exoplanets
Week 15	Exploring Space

Evaluation:	
Weekly Questions	30 % of final grade
Weekly Experiments/Activities	30% of final grade
Tests	40% of final grade
Total	100%

Grading Scale:	
90 - 100	A
80 - 89	B
70 – 79	C
60 – 69	D
0 – 59	No effort: F