



Astronomy with Mr. Bryant

"NOT ONLY DO WE LIVE AMONG THE STARS, THE STARS LIVE WITHIN US" – N.D. TYSON

SYLLABUS

Welcome to Astronomy!

What is astronomy anyway??

Astronomers study everything beyond the Earth and the Earth's place in universe. They observe changes in the heavens and try to scientifically understand how the universe behaved in the past and will behave in the future.

A short list of guidelines for class:

- ➔ **Share air/screen time equitably.** Know yourself, balance your listening and talking.
- ➔ **Value differences.** Remember that your perspective is not the only one and that we all face different challenges.
- ➔ **Argue using evidence.** Back up what you have to say with data.
- ➔ **Make sure everyone feels safe.** How can we support others?
- ➔ **Discomfort is okay.** Identify your learning edge and push it.
- ➔ **Own your impact.** Your intentions may not be the same as your impact. Positivity & respect are critical especially when we don't have in-person cues.
- ➔ **Create community.** Acknowledge others and don't isolate anyone.



THE BIG PICTURE

I want you to **do well** in this course,
to **feel supported** while you are here,
to approach the class **without fear**,
and to leave it **without regret**.



A Whiteboarding Classroom

We will be using physical or virtual whiteboards to share our thoughts and ideas with each other. What does that mean?

That means that you will frequently be working in small groups to discuss labs, activities, or readings and then using your whiteboards to record your thoughts and conclusions. You will then share your whiteboards with other groups in the class. This allows your thinking to become visible and will strengthen your learning – and I hope enjoyment of the class. Whiteboarding will also help strengthen your cooperation and communication skills. Remember those guidelines on the far left of the page? They will be the cornerstone of our class discussions.

Astronomy is a science with many wonders, and I can't wait for us to be able to share them with each other!

https://www.whiteboardsusa.com/whiteboarding_flier.pdf

Contact Information

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(Don't forget the "2!")

<http://www.mrbryant.net>

What to expect...

Topics

1st Quarter: Motions in the Sky, Sun-Earth-Moon System

2nd Quarter: Planets, Stars

Assessing Your Performance

In this class you'll be assessed with a version of standards-based assessment (SBA or SBG). Even if you've never encountered SBA before, I bet you're going to love it!

SBA Highlights for us:

- Points for grades, nope.
- Standards assessed on multiple quizzes & tests, yep.
- Most recent assessment on standard in Infinite Campus.
- Student ownership of learning
- Able to improve to mastery on each standard.
- Increases transparency in grading
- Replaces 100 levels with just 5 (79% vs 80% really?!)
- Less grading → More Feedback
- Emphasizes *learning over grading*

Standards-based assessment may seem very different to you, but we'll work



together to make sure everyone understands course expectations and practices. My goal is to help each of you reach proficiency on the standards and be transparent along the way.

Of course, SWHS does require me to submit a letter grade for each student, but we can still do that in a way that more accurately reflects your learning. Take a look at the example standard and level guide below. My plan is to have around 10 standards per quarter, and I'll use the numbers associated with the level guide to help determine a letter grade in Infinite Campus.

CONSIDERING THE PANDEMIC

Whether in-person or remote learning, we'll use [Google Classroom](#) and associated software. This will allow us easier transitions and provide less physical contact with objects that must be sanitized. If we are in-person, then students will be expected to wear facial coverings in class and maintain physical distancing as much as possible.

When life happens...let me know, whether it's an illness for you or a loved one, internet issues, anxiety, stress about an upcoming deadline, or perhaps celebrating a win, success, or family event. If I can help make accommodations to assist, lend an ear, or celebrate with you—I'd love to do so.

Sample Astronomy Standard. I can accurately compare physical characteristics of the Sun, Earth, and Moon.

- I can rank the Sun, Earth, and Moon by physical size.
- I can describe the most obvious surface features of each body (i.e. sunspots, oceans, continents, maria, craters)
- I can use proportional (mathematical) reasoning to compare the size (diameter) of the three bodies.
- I can describe the distance between each body in kilometers and/or by analogy with familiar objects.

Standard Level	Abbreviation	Description
Mastery	Ma	Accomplished demonstration of all relevant sub-skills. Errors, if any, are merely cosmetic. (10)
Proficiency	Pr	Good demonstration of sub-skills. Only a few small errors or omissions are present. (8.5)
Nearing Proficiency	Np	Developing demonstration of several sub-skills, but multiple and/or significant errors or omissions are present. (7.5)
Just starting	Js	Beginning demonstration of some sub-skills. Significant conceptual errors or omissions may be present. (6.5)
Insufficient Evidence	IE	No attempt made yet or work shows no understanding of this objective. (5)

This document represents my best attempt to chart our course through the semester together. However, conditions have changed since I last passed through here; we may have to take detours, make alternate arrangements, or otherwise revise our plans.

More to come...What questions do you have?

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