Welcome to Astro 101!

Dr. Colette Salyk & Dr. Katy Garmany
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Dr. Colette Salyk & Dr. Katy Garmany
Topics covered in this class include:

- The lives of stars
- The planets of the solar system
- Global warming
- The formation of planets
- Planets around other stars
- Astrobiology

- The history of astronomy
- The history of Kitt Peak Observatory
- Constellations and culture

- The scientific process
- Thinking like a scientist
Classroom policies:

Show respect for each other
Maximize learning

• Class begins promptly at 4 PM
• No phone use in class, including texting
• Homework is always due during the next class period (unless specified otherwise). Homework will be handed out in class, but will also be posted to the class website (TBA)
• Grades will depend on homework, exams and class participation. Class participation is worth 20% of your grade.
This will be an interactive classroom!

• Two field trips to Kitt Peak Observatory
• Observing with small telescopes
• Naked eye observing, including ipad apps
• Lecture-tutorials
• Think-pair-share questions
• Classroom labs and activities

The goal is for you to learn and have a positive, enriching experience. We need your participation, feedback and engagement.
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Two field trips to Kitt Peak Observatory are scheduled for:

**Monday October 14**

**Wednesday November 13**

- Buses will be provided by TOCC, leaving from this campus
- Program lasts from 4:20 PM - 8:30 PM
- Each trip will count as two classroom sessions
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• We will have several opportunities to observe with small telescopes in the courtyard
• We will do naked eye observing of constellations, the sun, and the moon
• We will introduce you to astronomy apps you can use on your ipad
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“Lecture Tutorials for Introductory Astronomy” (your class textbook)
And other similar workbook-like activities.

Work in pairs (or groups of 3)

Even while working together, everyone should fill out their own worksheet (that way you can use it to study from)

Worksheets and discussion with your partner(s) will allow you to work through difficult concepts

Studies show that classrooms using lecture tutorials do a better job than those using just traditional lectures
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Think-pair-share procedure:

- I display a question.
- You read the question.
- I take a vote on what you think the answer is.
- If most of you get the answer right, we move on.
- If many of you are confused about the answer, you will pair up with the person next to you, and try to convince them that you have the right answer!
- After this discussion, we will take another vote.
To be classified as a planet, a solar system object must meet three criteria:

(A) only orbits the Sun

(B) be sufficiently massive so gravity pulls it into a spherical shape

(C) have cleared its neighborhood of smaller objects

Which of these criteria is not met by the Moon, causing it not to be classified as a planet?
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