

Independent Observing Project – Presentation
ASTR:1070 (Stars, Galaxies, and the Universe) Lab

Your independent observing project presentation is worth 13 out of your total 150 points for lab this semester, representing ~9% of your total lab grade, or worth just over 1 regular weekly lab, and is presented by all lab group members in class during your second-to-last week of lab.

Your presentation should be 6 – 8 minutes in length, and supported with helpful slides.

Your presentation should contain:

- **Background related to your object**
 - Possible topics: historical discovery, when to observe it, what constellation it is in, could you observe it with your eyes, other names for the object, interesting discoveries recently made relating to the object, etc.
 - This portion should include several citations from books or online sources¹ supporting the information you present.
 - *This information should be more than a list of facts – it is your chance to convince your classmates that they should have studied your object instead.*
- **Experimental Plan: Data Analysis & Data Product**
 - Explain the kind of data product you produced and how you produced it.
 - *Your audience is your classmates – you want to explain what you’ve done without the full “recipe” in Maxim (they’ve completed labs to do exercises like these already). This section shouldn’t be any more than 30 – 90 seconds in length.*
 - Show your data product and explain what it shows.
 - Comparing your data product to other observations of your object is encouraged.
 - Connecting your data product to your background information presented is encouraged.
- **Calculation**
 - Calculation explanation should clearly explain each step, define any variables, and explain any relevant formulas.
 - Cite any external information used to complete your calculation.
 - Contextualize your number – is it large or small? How does it compare to that of other similar objects?
 - *Think of this an opportunity to do a problem in front of the class like your instructor: explicitly state any assumptions you’re making and show your work.*

The presentation is performed as a group. **Each group member should take a turn presenting information to the class.**

In addition, you should be prepared for 1 – 2 minutes of questions/answers following your 6 – 8 minute presentation. Polite asking of questions and engagement with your peer’s work is also expected. **Your group should ask a relevant question during 3 other presentations.**

¹ Online sources must not include Wikipedia. Citations of articles outside Wikipedia are fair game, however. Online articles should meet standards for credibility, but do not have to be academic papers. Examples include: Popular Science, Sky & Telescope, NASA websites, etc.