# ASTR 1020: Stellar and Galactic Astronomy

## Lab Syllabus

Fall 2019, 721 Langdale Hall

Lab Instructor's Name: Mary Geer Dethero
Lab Instructor's Email: dethero@astro.gsu.edu
Lab Instructor's Office: 1 Park Place, Office 709
Lab Instructor's Website: http://www.astro.gsu.edu/~dethero/

**Course Description:** This course consists of 9 labs and 1 project which are designed for helping students understand the key concepts discussed in the lecture, ASTR 1020: Stellar and Galactic Astronomy.

**Student Materials:** Bring the following to class **every** lab period,

- Pencils & Eraser.

**Lab Grades (100 points total):**

**1) Lab Activities:** 10 points each. 80 points total.

- Laboratory work is to be completed in class and turned in at the end of each lab period. **Late labs, or lab work done outside of class will not be accepted*.**
- Each completed lab will be scored on a scale of 0-10 points. Your **lowest lab score will be dropped**. If you miss lab for any reason, that lab will be dropped.
- Your average lab score will count as 25% of your overall ASTR 1010 grade.
- Failure to attend at least a half of the lab (more than 5 labs) will result in an F for the lecture course because this is a lab science and lab attendance is required.

**2) Term Project:** 20 points. You can choose any topic related to the ***ASTR 1020*** course (Stellar and Galactic Astronomy) for your project. The type of project can vary by your lab instructor's discretion. You will present your project at the end of the semester.

**Attendance:** You must attend the lab section for which they have enrolled **every week**. You are not allowed to attend another section to make up a missed lab.

**COVID-19 Policy:** It is requested that students wear face masks covering their nose and mouth at all times during the lab. If a student tests positive for COVID-19, any accommodations will be informed by evolving guidance from the CDC on quarantine. In most cases, there will be no major change to mode of course delivery, so students will be responsible for making up work missed during quarantine. Anyone who tests COVID positive should alert the university and their instructors so that appropriate contact tracing can be conducted. https://covidinfo.gsu.edu/covid-19-resources/report-a-case/

**Tardiness:** Our tardiness policy is that every five minutes late results in a deduction of 0.25 points off your grade. Therefore 10 minutes late is a penalty of 0.5 points. If you

are 30 or more minutes late that will result in a zero for the lab. Missed labs are automatically a zero. If you have any questions or concerns, please contact your TA and/or instructor.

**Honesty Policy:** Students are expected to follow the honesty policies of the university. Any work that does not represent your own efforts will receive a score of zero. When group work is done, it is expected that each student in the group will reply to questions using their own words. **Do not copy other student's lab work or observation report.**

## Tentative Weekly Schedule

| Dates | Description |
|---|---|
| Aug 25 | Organization Day. ***NO LABS MEET!*** |
| Sept 1 | Lab 1: Rotation of the Sun |
| Sept 8 | Labor Day Week. ***NO LABS MEET!*** |
| Sept 15 | Lab 2: Spectroscopy and Atomic Structure |
| Sept 22 | Lab 3: Eclipsing and Spectroscopic Binary Stars |
| Sept 29 | Lab 4: Photometry of the Pleiades |
| Oct 6 | Lab 5: The Period-Luminosity Relationship |
| Oct 13 | Lab 6: Hubble's Law |
| Oct 20 | Lab 7: The Period-Luminosity Relationship |
| Oct 27 | Lab 8: The Distance Ladder,<br>**Deadline for notifying instructor of project topic.** |
| Nov 3 | Lab 9: Black Holes |
| Nov 10 | **Project Presentation** (***LAST MEETING TIME*** ☺) |
| Nov 17 | ***NO LABS MEET!*** |
| Nov 24 | Thanksgiving Break. ***NO LABS MEET!*** |
| Dec 1 | GOOD LUCK ON FINALS. ***NO LABS MEET!*** |

If you encounter problems that your lab instructor cannot handle, please contact your lecture class instructor.