Astro 293 – Observational Astronomy Lab

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The purpose of this class is to introduce you to some aspects of practical observational astronomy and to give you a chance to explore various topics and techniques of astronomy on your own. This includes carrying out an observing project by yourself. You are therefore encouraged to ask many questions, make many mistakes and do more and/or different experiments than is required for your lab. Grades will be based on the lab reports (usually due the beginning of next class) and a final project. It is important to type them and keep them neat. Your lowest grade of the lab reports will be dropped and will not count against you. The lab reports count 65% and the project 35% of your final grade.

1. Positional Astronomy: Determining Celestial Coordinates and Time .... 2 weeks
2. The Nature of Light: Identifying Elements from their Spectra .... 2 weeks
3. Stellar Spectroscopy: Measuring A Star's Temperature from its Spectrum .... 1 week
4. Binary Stars and Stellar Masses: Gravity and Kepler's Law .... 1 week
5. Parallax: Methods for Measuring Distance in Astronomy .... 1 week
6. The Distance to a Star Cluster .... 2 week
7. The Age of a Star Cluster .... 1 week

8. Observational Project .... 5 weeks