

HONS 160 Open Lab
Telescope Construction and Evaluation

Our department began unstructured labs in introductory physics several decades ago but Honors Astronomy is the only astronomy section to take the same approach with its curriculum. Last semester the disrupted schedule due to the weather short-circuited the opportunity for the first part of the course, so what we are doing with this activity will be new to you.

Your task is to use the parts provided to construct and use two different types of refracting scopes, a Keplerian telescope and a Galilean one. The first thing to know is it is both allowed and desirable to be creative with the assignment and also you should have fun with it. You will be following in the footsteps of Galileo and Kepler and seeing what they saw but almost certainly with better equipment.

I have a small shop where I can make cardboard or wooden parts if you need them. Each class and lab meeting I will inquire about your progress and answer questions. Tomorrow I will post some pictures of cardboard telescopes I have made to give you ideas for working with your telescope.

Below are some web page links. I evaluated a dozen or more pages and think these might give you ideas. The last link is my page on the Safe Solar Viewer I taught kids to make for the eclipse. I will post more suggestions this weekend.

<https://www.savvyhomemade.com/building-a-homemade-telescope/>

<https://www.ifa.hawaii.edu/users/gruff/default/Astrolab/07BasicTelescopeOptics.htm>

<https://www.youtube.com/watch?v=8UZM113-fq0>

<http://opticgearlab.com/telescopes/how-to-make-a-telescope.html>

<https://www.space.com/24114-how-to-build-a-telescope-science-fair-projects.html>

http://richardsont.people.cofc.edu/safe_solar_folder/index.html