

Donald P. Shiley School of Engineering
EGR 491/591 Telescope Design, Fall 2019
Assignment 4 – Design Project

- 1) Document the “Key” Decisions and Knowledge Gap work that was done for the previous assignment and worked on in class. In other words, transfer the information on the KD and KG sticky notes to paper for documentation.
- 2) Complete the KG (go learn in order to “fill the gap”). Document what you did, what you learned (follow the standard problem-solving format!!!).
- 3) Document the Decisions your “team” made based on the KG’s being “filled.”
- 4) As a team of 2, sketch at least two viable alternatives for your part. Refer to the KD that allowed you to select the “best” alternative. Then proceed to “step 5” ...
- 5) Based on your “best” alternative, using “cardboard and duct tape” (whatever materials are cheap and easy to work with – visit the makerspace), create a half-scale “proof of concept prototype” for an 8” f/7.5 mirror (focal length is $7.5 * D_{\text{mirror}} = 60$ ”). Since it is half-scale, it will be a 4 inch ‘mirror’, 30 inch focal length.