ASTR 1000 Descriptive Astronomy
Incidental Projects

Purpose
Enrich your astronomy knowledge outside of the scheduled classroom meetings and communicate your knowledge in ways that are meaningful to you.

What Incidental Projects are
These are astronomy-related activities of your choice, each of which earns you points based on how much work I estimate the activity requires. You may accumulate up to 200 points from any combination of the projects, which constitute 20% of the course grade.

Some Project Ideas
These are some projects that I can think of, with maximum point values. You are encouraged to propose others; we can negotiate their point value.

3-D Constellation model (120 points)
Print a map of a constellation of your choice as viewed from Earth. Place "stars" at their correct scaled positions to show their arrangement in space.

I have full instructions and all materials necessary for these models. I will schedule times for us to work on them.

Physical model of an astronomical object (150 points)
Make a cutaway model of a planet, moon, or similar object. If you can think of a way to model a galaxy (I can't), go for it.

Complete a "Rubin Labs" lab (100 points)
The Vera C. Rubin Observatory has several online interactive "labs" at https://rubinobservatory.org/education. When you finish, send me your results, so that I know you did it.

Report on a current astronomer (100 points)
Interview an active astronomer. Report on what they investigate, what tools they use to study it, and what they have learned.

Report on a historical astronomer or Astrophysicist (80 points)
Report briefly (five minutes or less) to the class about the contributions of a historical worker in the field.

Report on an astronomy book (80 points)
Read a popular book on astronomy. Some examples include *The Big Bang* by Simon Singh, *A Brief History of Time* by Stephen Hawking, *Bad Astronomy* by Phil Plait, anything astronomical by Neil DeGrasse Tyson, *Bang!!* By Brian May et al., etc. Report on the book orally to the class in five minutes or less.

Attend a planetarium show (40 points)
The University of Wyoming has its very own Harry C. Vaughn planetarium, underground between the Classroom, Physical Sciences, and Biological Sciences buildings. It presents shows on astronomy as well as shows purely for entertainment. Attend an astronomy show and present your ticket to me for credit.

Report on a planetarium show (75 points)
Attend an astronomy planetarium show, present your ticket to me, and report on what the show covered for credit. Identify at least one thing that you learned.

Attend an evening stargazing session (40 points)
Come out one evening that I schedule to look at sky stuff.

Report on an evening stargazing session (75 points)
Come to a stargazing session, and report on what you saw. Identify at least one thing that you hadn't seen before.

Ask a question about class (20 points)
A valid question, about the topic at hand. Ask the question during the lesson or within 24 hours. Limit five per person per semester.

Ask a question to a guest presenter (40 points)
I plan to occasionally host brief presentations by UWyo astronomers during class time. Ask a valid question about the topic at hand the question during the presentation or within 24 hours. Limit one per presentation.