Syllabus: ASTR 520 Advanced Extra Galactic Astronomy Seminar M/W 3:00-4:00 Rm 202

Instructor: Gurtina Besla gbesla@email.arizona.edu

Website: https://lavinia.as.arizona.edu/~gbesla/ASTR_520.html

Goals:

- Understand the capabilities of HST and its role in the advancement of Extra Galactic Astronomy.
- Learn how to write an HST-level observational or theoretical proposal.

Evaluation:

- 25 minute presentation on a subject under given Topic Categories (below)
- 3 page scientific justification for an HST proposal: **DUE APRIL 29th 2015**

Topics:

- 1) Resolved Stellar Populations
- 2) IGM and QSO Absorption Lines
- 3) Unresolved Stellar Populations and Galactic Structure
- 4) ISM in External Galaxies
- 5) *QSOs and AGN
- 6) *Cosmology

Schedule:

January:

HST Overview, Instruments, Proposal Types, Proposal Structure

February:

Resolved Stellar Populations + Presentations IGM and QSO Absorption Lines + Presentations Unresolved Stellar Pops and Galactic Structure + Presentations

March:

ISM in External Galaxies + Presentations
QSOs and AGN, Cosmology (overview of proposal examples)
NOTE: March 4th class is moved to March 6th
March 9th class is moved to March 13th

April:

Science Writing: Abstracts, Editing, Logical Fallacies (Poss)
The Future of Extragalactic Astronomy in the Era of JWST (G. Rieke)
Ethics
How the Panel Review works

NOTE: April 8th and 13th Taught by Richard Poss April 16th Taught by George Rieke

First Week of May:

Mock Panel