Scholarly Engagement & Seminar Norms

Artifact Header (for course materials)
Course: ASTR 201
Module: [TBD] (used throughout the semester)
Learning Objectives: Practice scientific reasoning and evidence-based discussion (supports course learning outcomes).
Concept Throughline: Observables → models → inference, with uncertainty as normal.
Math level: Astro 201 (equations are allowed, but we always interpret symbols physically).
Mode: Draft

What is "Scholarly Engagement" (10%)?

In this course, your engagement grade measures something *real*: whether you are practicing the skills scientists use to build understanding together.

You earn Scholarly Engagement credit through: - **iClicker participation** during in-class questions (often think–pair–share). - **In-class group inquiry activities** (from *Learning Astronomy by Doing Astronomy*). - **Socratic Seminars** (a structured discussion where we interpret a shared "text," often a figure, spectrum, short excerpt, or dataset).

This is not "points for talking." It's credit for *doing the intellectual work* of astronomy in community.

What "good engagement" looks like (examples)

During discussion, lab-style activities, or seminar, strong engagement sounds like:

- "My claim is *, because the plot shows* ."
- "I'm not fully sure, but I think _____ **under the assumption that** _____."
- "Can we check the axis / units / trend again? If that's true, then _____."
- "An alternative explanation could be _____. What observation would separate them?"

You do *not* need to be loud to be engaged. You do need to be *evidence-based* and *constructive*.

Socratic Seminar norms (how we talk like scientists)

In seminar, our goal is **shared inquiry**, not performance.

1) Anchor claims in evidence.
If you make a claim, point to something specific: a line in the text, a feature in the figure, an axis label, a trend, a number.

2) Name assumptions out loud.
Astronomy is inference under constraints. Assumptions are part of the job, not something to hide.

3) Disagree with ideas, not people.
Use: "I interpret it differently because…" not "That's wrong."

4) Share the airtime.
If you've spoken a lot, practice listening. If you've been quiet, try one contribution: a question, a clarification, or one evidence-based claim.

5) Let uncertainty be normal (but not vague).
Uncertainty is fine. Vague claims are not. Try: "I'm ~70% confident because…"

Practical seminar roles (so everyone can contribute)

Depending on the day, you may be in an **inner circle** (speaking) or **outer circle** (observing + supporting).

Outer circle contributions that count as full engagement: - Track where the group used **evidence** well (and where we didn't). - Notice **assumptions** that were stated (or missing). - Identify a moment when someone **revised** their thinking. - Offer one "what would we measure next?" question during the debrief.

What hurts your Scholarly Engagement grade

- Side conversations during class or seminar.
- Phone use that distracts you or others.
- Excessive tardiness and/or absences.
- Dismissing classmates instead of engaging their reasoning.
- Speaking without evidence (repeatedly) after redirection.

Academic integrity and AI tools

Your thinking matters here. **Generative AI tools (e.g., ChatGPT, Copilot, Gemini, Claude) are prohibited for course-related assessments.**
That includes any for-credit written seminar prep/reflections, if assigned. If you're unsure whether something counts, ask before submitting.