

## ASTR/CHEM/GEOL/MATH/PHYS 495A/B Seminar

Spring 2014: January 13–May 17

F 12:00 PM–12:50 PM, Room: STB 226

**Draft 2:** May 16, 2014 (subject to change)

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**Instructor:** Kathy Cooksey, Ph.D.; STB 219; kcooksey@hawaii.edu; 808-932-7195

**Office Hours:** M 2–3 PM, W 3–4 PM, R 10–11 AM, and by appointment

**Website:** Laulima ASTR-495B-001 (HIL.14334.SP14)

**Prerequisites:** Senior standing or instructor's consent.

### Course Description:

**495A:** Seminar presentations are on topics in the physical sciences (astronomy, chemistry, geology, mathematics, and physics) by enrolled students, faculty, and invited speakers. 495A Students are *not* required to present a seminar and must take the course for CR/NC. ASTR495A is cross-listed with CHEM495A, GEOL495A, MATH495A, and PHYS495A.

**495B:** Seminar presentations are on topics in the physical sciences (astronomy, chemistry, geology, mathematics, and physics) by enrolled students, faculty, and invited speakers. 495B Student *are* required to present a seminar and must take the course for a letter grade. ASTR495B is cross-listed with CHEM495B, GEOL495B, MATH495B, and PHYS495B.

**Pre-requisites:** Senior standing or instructor's consent.

### Course Goals:

495A students will:

- Evaluate a speaker and science talk based on the merits of:
  - Preparedness (Was the speaker well-prepared for the talk?)
  - Delivery (Did the speaker present in a professional manner?);
  - Slides (Were the slides designed and organized well?);
  - Efficacy (Was the information conveyed effectively?); and
  - Content (Was the content of appropriate complexity, current interest, and relevance for a senior-level seminar?).

See Evaluation Rubric section at the end of this document.

- Provide constructive and civil feedback on the evaluations.
- Ask good questions to further the audience's understanding and challenge the speaker in a meaningful way; and
- Broaden their horizons by learning about topics of current interest in the natural sciences.

495B students will:

- Fulfill all of the objectives for 495A above.
- Practice—and, ideally, improve—designing and executing an effective scientific talk; and
- Learn the selected topic in great detail.

**Email and Laulima:**

- UHH considers email and Laulima an official form of communication; students are responsible for receiving and returning information in a timely manner.
- The student must ensure that the instructor has her/his correct email address.
- The schedule of speakers will be set as soon as possible and posted under Laulima ASTR495B “Resources.”
- Evaluation forms will be filled out using Laulima ASTR495B “Tasks, Tests, and Surveys.”

**Expectations for 495A/B:**

- Be supportive and respectful of the speaker, including being on time to class, remaining quiet during the talk, and asking reasonable questions during or after the talk.
- Attend every class.
- Fill out evaluation forms by the following **Friday at 5 PM**. The instructor will receive your comments, so be constructive and fair.

**Expectations for 495B only:**

- Complete expectations listed for 495A/B above.
- Give a seminar that lasts at least 15 minutes (15 points).
- Attempt to answer questions from the audience.
- Submit the title and 80+ word abstract by email to instructor by **5 PM on the Monday** prior to the Friday you are speaking. The title and abstract will be posted to Laulima ASTR495B.
- Submit final slides to instructor by 5 PM on the day before the talk OR bring slides to class and load them yourself (test the system out for technical problems, especially Mac to PC issues.)
- Choose a presentation topic that you find interesting scientifically and would like to present. Topics can be discussed with course instructor and/or your department faculty.
- Introduce the current speaker one week prior to your speaking date (state the name, title, major, year/graduation date, etc.) When there are two or more speakers, introduce the speaker corresponding to your time slot.
- If you must change your scheduled talk slot, you are responsible for swapping with another student, and both of you must inform the instructor before the talk title and abstract is due (i.e., 5 PM on the Monday prior to the Friday you are speaking.)
- Class and instructor feedback available upon request.

**Class grade for 495A only:**

- To receive a grade of CR (credit), students must earn 85% of the evaluation points (5 points per speaker). Student’s must attend the talk and fill out all survey questions to get all 5 points per speaker.
- If you must miss a class for a “reasonable reason,” email the professor *before* the start of class time. You will then be excused from the attendance and evaluation points.
  - Defining “reasonable reason” is tough because Life happens in diverse ways—illness, emergencies, interviews.<sup>1</sup> However, these Life happenings are *irregular* not patterns.
- If you are unable to email in advance due to *extreme* circumstances, contact the professor as soon as possible. Such instances will be judged on a case-by-case basis.

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<sup>1</sup>“Mental health days” are totally understandable, but they aren’t an excusable reason.

**Class grade for 495B only:**

- Points required to earn a given letter grade are given below:

Grade	% Required
A	$\geq 93$
A-	[90, 93)
B+	[87, 90)
B	[83, 87)
B-	[80, 83)
C+	[77, 80)
C	[73, 77)
C-	[70, 73)
D	[60, 70)
F	$< 60$

where e.g., [90, 93) means  $\geq 90\%$  and  $< 93\%$ .

- Class grade will depend on:

1. **Attendance and evaluation forms: 50% of your class grade or 50 points.**

Earn 5 points per speaker for attending the talk *and* completely filling out the evaluation form. The attendance and eval points you earn will be divided by the total attendance and eval points possible and multiplied by 50 to normalize your score to points.

- The excuse policy described in “Class grade for 495A only” previously also applies to 495B.

2. **Submission of abstract on time: 15 points possible.**

Title and abstract must be emailed by 5 PM on the Monday prior to the Friday that you’re speaking. The abstract must be 80 words or longer. Five points will be deducted if sent after Monday at 5 PM, but before Friday at 12 PM. A maximum of 5 points will be awarded if sent after Friday at 12 PM on the day of the talk. Zero points will be awarded if not submitted at all.

3. **Length of talk: 15 points possible.**

The presentation must last at least 15 minutes. If the talk lasts less than 15 minutes, 1 point will be deducted for each minute under 15 minutes. Presentation timing will start when the speaker begins speaking and will stop at the end of the talk. Presentation time does not include the time spent answering questions.

4. **Student’s comments and evaluations: 20 points possible.**

Students will rate each speaker using the Laulima ASTR495B on-line evaluation form. The form has five categories: 1) preparedness, 2) delivery, 3) slides, 4) efficacy, and 5) content (see Evaluation Rubric below). Each category is based on a scale of 1 to 4 points, representing poor, fair, good, and excellent. The speaker will earn the weighted average score from the students in each category. The instructor reserves the right to modify these scores if the ratings appear unfair.

**Advising:** Advising is a very important resource designed to help students complete the requirements of the University and their individual majors. Students should consult with their advisor at least once a semester to decide on courses, check progress towards graduation, and discuss career options and other educational opportunities provided by UH Hilo. Advising is a shared responsibility, but students have final responsibility for meeting degree requirements.

**Evaluation Rubric** Speakers and talks will be evaluated by the other 495A/B students on the following merits.

- **Preparedness:** Was the speaker well-prepared for the talk? Consider the following:
  - Did the speaker display mastery of the content?
  - Did the title and abstract describe the actual presentation well?
  - Did the speaker have technical difficulties that should have been taken care of before the talk?
  - Did s/he know what was on her/his slides?
  - Did s/he organize the slides so s/he did not have to flip back and forth excessively?
- **Delivery:** Did the speaker present in a professional manner? Consider the following:
  - Did s/he monitor the understanding and engagement of the audience?
  - Did s/he speak loudly and clearly?
  - Did s/he address the audience the majority of the time? In other words, did s/he face forward and not read from the slides or notes most of the time?
  - Did s/he say more than just reciting the content on the slides?
  - Did s/he describe figures carefully, detailing what was plotted and what it meant?
- **Slides:** Were the slides designed and organized well? Consider the following:
  - Was the point of each slide obvious?
  - Was mostly everything on the slide necessary to convey the point?
  - Did the content correspond to what the speaker was saying?
  - Were the slides (text, figures, etc.) legible?
  - Were facts and figures cited appropriately?
- **Efficacy:** Was the information conveyed effectively? Consider the following:
  - Did you learn why the topic is important?
  - Could you identify the central question(s) being discussed?
  - Did you understand what was done to answer the central question(s)?
  - Can you now name the main conclusions of the talk?
  - Did s/he take the time to understand and address questions appropriately? (“Address” does not mean answer; “I don’t know” is an appropriate response. Preferably, the speaker would then speak to how one might answer the question.)
- **Content:** Was the content of appropriate complexity, current interest, and relevance for a senior-level seminar? Consider the following:
  - A very skilled speaker can make very complicated information accessible so “content” should not be evaluated with a simple gut check (e.g., “I could do that == Poor” or “I didn’t understand. == Excellent.”)
  - Was the topic choice well-justified in the talk?
  - Was the audience engaged in the talk?

The scale is poor, fair, good, and excellent.