

Semester and Year this Document Covers

Spring 20xx

Course Number and Title

ChEE 597B Engineering Outreach Methodology

Course Description

This workshop will support graduate students interested in K-12 outreach and working in K-12 classrooms through the Engineering program. Through weekly discussions, assignments, reading and journaling, graduate students will learn teaching methods and about how engineering concepts are incorporated into everyday classes.

Instructor Information

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Learning Outcomes

Students should demonstrate the ability explain their research to the general public

Students demonstrate the ability to communicate their career paths and disciplines orally in the form of videos

Required Texts and Materials

Readings will be provided

Schedule of Topics and Activities

Schedule and assignment due dates is attached

Assessments

Assessment Categories	Percentage of final grade
Attendance and participation in class activities	20%
Weekly classroom log	20%
Presentation videos (3)	45%
Final Lesson Plan after revisions	15%
Total	100%

Grading Scale and Policies

A 90% and above

B 80% to 89%

C 70% to 79%

University Policies

<https://academicaffairs.arizona.edu/syllabus-policies>.

Subject To Change Notice

Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor of this course.

Graduate Student Resources (optional)

Please consider including a link to the University of Arizona's Basic Needs Resources page:
<http://basicneeds.arizona.edu/index.html>

SPRING 20xx - SBAR SEMINAR

Week	Date	Presenter	Topics	Milestone/Deliverable
1	xx/xx	TA	GROUP MEETING 1 <ul style="list-style-type: none"> Check-in on classroom experience Review deliverables and plan for the semester Discuss interview questions 	
2	xx/xx-xx/xx		Video Project Selections	Brainstorm who you want to do your career/discipline interview with Review Lessons/Discuss with Teacher Choose Lesson for Explainer Lesson Video Submit/email to Corey/Torran
	xx/xx-xx/xx		Career Interview Video Proposal Check-in	Submit 3 ideas for careers interview, identify the person/interviewee Short meeting with either Torran or Corey—schedule this independently Contact interviewee
4	xx/xx-xx/xx			Obtain signed UArizona media release form Conduct interview between now and 3/12
5	xx/xx		GROUP MEETING 2-- Film Production 101 Review: <ul style="list-style-type: none"> Collaborative 5 to 7-minute video View from the Field Video 	Guest presentation/Mike Griffith Schedule Studio Time this involves your teacher please provide 2, 2-hour slots on the provided schedule, confirmed by your teacher. Review your plan with your SBAR teacher for the video. Schedule filming with Do from COEd and SBAR staff

SPRING 20xx - SBAR SEMINAR

6	xx/xx-xx/xx		Storyboard Presentations-Draft (Explainer Video) or Creative Option (Huitzilin and Tenzin)	Storyboard or detailed description with components that will need to be created-- Upload to Box
7	xx/xx-xx/xx		Filming Session:	
8	xx/xx-xx/xx		Filming Sessions:	
9	xx/xx		GROUP MEETING 3	Due: Career Interview
10	xx/xx-xx/xx		Filming Sessions:	
11	xx/xx-xx/xx		Filming Sessions:	
12	xx/xx-xx/xx		Filming Sessions:	
13	x/xx		GROUP MEETING 4 <ul style="list-style-type: none"> Watch completed videos Plan for the Summer digital PD 	
14	x/xx		Last Class	DUE: Collaborative 5 to 7-minute video and View from the Field Video DUE: Lesson Revisions Uploaded to Box

Deliverables for Spring 20xx semester

Media Products

- SBAR Career/Discipline Interview**, 1-3 minutes (1 each fellow). These short videos will be used in the Summer PD for rural teachers and as a resource that is added to the lesson plan. The goal is to get someone working in an SBAR related field to give concise and engaging answers about their work at a level a fourth grader would understand.

Questions can include:

What is your career?

How does your career relate to biofuels/bioeconomy or emerging careers?

How can a student learn more about this field?

- Collaborative 5 to 7-minute video** (Educator & Teacher)
“Explainer” Video with photos/video of lesson being implemented, Artifacts, outcome. Studio recorded at COEd, edited by fellows. For Fellows with a second year teacher: Matt, Arisbeth, Ali, Seth. The Fellows are more of the producers and the teachers are lead presenters with fellows involved. There may be PPT, video, or other resources for the video. The rationale for filming these teachers is to document the experienced SBAR

teachers explaining how to use one of their lessons. This is a tutorial for the lesson for someone who is going to try out the lesson. For Tenzin and Huitzilin it is optional to create one of these videos for your teachers. Felicia and Tina will make an explainer video next year.

- 3. Lesson related presentation video.** 3-10 minutes. Repeat of a PPT of what you presented for a lesson. This is in exchange for hours in a school. Could be during dead week or your school spring break. Those two weeks in March may be our best time. Priority is for the lesson you are going to post. Secondary, would be other presentations that are good as a resource for SBAR. At minimum you need to record at least one presentations for the revised lesson you are submitting. You're filming this like a guest speaker, so that once you've left SBAR teachers could still use your presentation in the lesson plan.
- 4. Lesson Revisions**—continue the lesson you have begun. Ready for Publication (one per fellow). These lesson will be teacher designed and/or tested and focused on arid lands in a way that is local, place based and culturally relevant.

Please be sure to:

- Maintain your weekly classroom log
- Notify Corey and Torran if any challenges arise in your classroom experience or video work
- Be present at monthly meetings
- Track and provide any Deliverables that are due for each week. If we aren't receiving notifications or projects we will need to go back to weekly group classes.