
GEOS 606
Teaching Associate Preparation

Course Syllabus

Fall, 2014

Instructor:

Dr. Julie Monet

Office: PHSC 119A

Office Hours: Wednesday 3:30 - 4:30 & Friday 12:30 - 1:30 or by appointment

Office Phone: 530. 898-3460

Email: jmonet@csuchico.edu

Course Description:

This course is designed for graduate teaching assistants. The focus of students' learning is on instructional practice, pedagogical skills and classroom management for active learning and effective teaching practices in an undergraduate science lab.

Materials:

You will need a flash drive (at least a 4GB) or a computer to download the early semester and end of the semester teaching videos.

Student Learning Outcomes:

Upon the successful completion of this course students will be able to:

- Develop questions to engage students in active learning based on Bloom's Taxonomy
- Design and implement formative assessment strategies
- Construct a lab syllabus that clearly establishes guidelines for student classroom conduct and learning expectations
- Synthesize science education readings for practical applications in a laboratory setting
- Create or revise an existing test review to include characteristics of active learning
- Engage in critical self-reflection as a tool to improve their teaching practice

Attendance Policy

To optimize your learning experience it is important that you attend all regularly scheduled classes. If you miss more than two unexcused classes you will have missed more than 10% of the course. This will unquestionably result in you learning less than if you had been present. Your final grade will be lowered after your third absence by (5%) for each subsequent day missed.

How Learning will be Assessed:

1. Homework 30%

Throughout the semester you will be asked to try what you are learning in your classroom practice and then to reflect on the teaching experience, strategy, classroom management technique or assessment tool implemented during the lab you teach. The assigned readings often drive the focus of the class discussions. It is your responsibility to bring an electronic or paper copy of the articles to class.

2. Class participation and attendance -25%

Class discussions and collaboration with peers is a key component of your learning, therefore it is critical that you attend class, contribute to class discussions, and provide constructive feedback to your peers. Participation in class discussions require that you diligently stay current with the readings.

3. Classroom Observations - 20%

During the semester you are required to complete 3 peer classroom observations. The purpose is to observe the interactions among students, to identify strengths and weaknesses of the lab activity, and to provide constructive feedback to the instructor you are observing

4. Culminating Project - 20%

Part A (10%): Self-reflection on final teaching video

Part B (10%): Teaching portfolio

Note: A detailed handout and a rubric will be provided for Part A & B

Grading Policy

Late work

Any work received after the due date and before the next class meeting is considered late a 10% reduction is automatically applied. Any work beyond the 1-week grace period will not be accepted.

Grading scale

A 93 - 100%	B- 80 - 82%	D+ 67 - 69%
A- 90 - 92%	C+ 77 - 79%	D 60-66%
B+ 87 - 89%	C 73 - 76%	F 0 - 59%
B 83 - 86%	C- 70 - 72%	

Calendar and Homework Schedule (tentative)

- All reading and handout materials are posted on **Blackboard Learn**.
- Note this is a “**tentative**” schedule. I typically adjust the focus of the class activities based on the needs of the students.

	Classwork	Homework
08/21	<p>Orientation: Getting ready for the first day of teaching</p> <p>Handouts:</p> <ul style="list-style-type: none"> •Template for lab syllabus <p>Discussion:</p> <ul style="list-style-type: none"> •Seating assignment (cards) 	<p>Before the first day of teaching, read the preface and Chapter 3 from the book, Mckeachie's Teaching tips. Pay special attention to the sections, Setting the Stage and Breaking the Ice (Download reading from BBL).</p>
08/29	<p>Class discussion: Chapter 3</p> <p>Handouts:</p> <ul style="list-style-type: none"> •Syllabus •TA semester teaching schedule •Classroom observation schedule •Classroom Observation Guide 	<p>HW1: Reading Response <i>What is Constructivist Learning? What Do Constructivist Teachers Do? (Download from BBL)</i></p> <ol style="list-style-type: none"> 1. Briefly summarize the atmosphere in classroom A and for classroom B. 2. What are the differences between the types of questions asked in class A and B? 3. What are the classroom management issues that you think might be associated with each style of teaching? 4. Do you agree or disagree with the authors? Why or why not? <p>Due Sept 05 (email a copy before the start of class)</p> <p>Classroom Observation #1 <u>130 TA's only</u> Complete classroom peer observation #1 during the week of Sept 2-Sept 5.</p>
09/05	<p>No class during weeks that require you to complete a peer classroom observation.</p>	<p>HW2: Teaching Activity- <u>130 TA's only</u></p> <ul style="list-style-type: none"> • Classroom observation write-up (Download from BBL) <p>Due Sept 12 (email before the start of class).</p> <p>Classroom Observation 1 - <u>101 TA's only</u> Complete classroom peer observation #1 during the week of Sept 8-Sept 12.</p>

	Classwork	Homework
09/12	<p>Class Discussion: <i>Reformed Teaching Observation Protocol (RTOP) Videos 1 & 2</i></p> <p>Handouts:</p> <ul style="list-style-type: none"> • “Modified” Teaching Observation Rubric • RTOP Manual 	<p>To do when you teach: (during the wk of 9/8 - 9/12)</p> <ul style="list-style-type: none"> • 101 & 130 TA's Videotape the first 20 - 25 minutes of the lab you teach <p>HW 2:Teaching activity - 101 TA's only</p> <ul style="list-style-type: none"> • Classroom observation write-up (Download from BBL) <p>HW 3: Teaching Activity 101 & 130 TA's</p> <ul style="list-style-type: none"> • Watch and score your own teaching video using the “Modified” Teaching Observation Rubric (download BBL) <p>Due Sept 19: email and <u>bring a paper copy to class.</u></p>
09/19	<p>Class Discussion:</p> <ul style="list-style-type: none"> • RTOP rating Video 3 • 5 subcategories of the “Modified”Teaching Observation Rubric <p>Handout:</p> <ul style="list-style-type: none"> • <i>Setting semester teaching goals</i> 	<p>HW4: Improving Your RTOP Score:http://serc.carleton.edu/NAGTWorkshops/certop/improving.html</p> <ul style="list-style-type: none"> • Select two strategies that can be useful in helping to meet the teaching goals you have identified for this semester. • Explain how you will implement these strategies into your classroom practice <p>Due 9/26 (Bring a copy to class)</p> <p>Important! <i>Bring to class a copy of the lab you will be teaching the week of 9/29 - 10/03).</i></p>
09/26	<p>Class Discussion: Lab Videos (GEOS 130)</p> <ul style="list-style-type: none"> • Questioning strategies to solicit students prior knowledge • Making connections from classroom science to students' everyday experiences. 	<p>To do when you teach: (during the wk of 9/29 - 10/03)</p> <p>At the start of lab -</p> <ul style="list-style-type: none"> • Ask a prior knowledge question about the topic students will be investigating in lab that day. • Ask students to brainstorm about how the science they are learning in lab can be applied to applications in their everyday lives. <p>Reading(s)</p> <ul style="list-style-type: none"> • <i>Facilitating a Discussion</i> • Rote verses Meaningful Learning <p>HW5: Teaching activity</p> <p>Be prepared to lead a discussion on the reading in class next week. Bring a print or electronic copy of the reading to class. -101 TA's paper 1, -130 TA's paper 2</p>

	Classwork	Homework
10/03	<p>Topics for Discussion:</p> <ul style="list-style-type: none"> • Prior knowledge questions • Facilitating a Discussion • Rote verses Meaningful Learning, 	<p>To do when you teach: (wk of 10/05 - 10/10)</p> <ul style="list-style-type: none"> • Implement one of the strategies from today's discussion on facilitating a discussion. <p>Reading: 1) Introduction to Bloom's Taxonomy No questions. Be prepared to discuss the reading. Bring a print or electronic copy to class.</p>
10/10	<p>Class Discussion:</p> <ul style="list-style-type: none"> • Bloom's Taxonomy • Whiteboards <p>Handout:</p> <ul style="list-style-type: none"> • Whiteboard scoring rubric 	<p>*To try when you teach: Whiteboards(wk of 10/13 - 10/17)</p> <ul style="list-style-type: none"> • Ask a summative assessment question that requires an explanation and a labeled diagram on their group whiteboard. <p>HW 6: Teaching Activity</p> <ul style="list-style-type: none"> • Take a photo of any two whiteboards • Score the whiteboards • Provide a brief explanation to justify the score you gave them (3, 2, or 1). <p>Due 10/17 -email the photos and score justification before the start class.</p>
10/17	<p>Class Discussion:</p> <ul style="list-style-type: none"> • Whiteboard discussion (scoring, levels of Bloom's Taxonomy, next steps...) • Quickwrites - as a summative assessment tool <p>Handout:</p> <ul style="list-style-type: none"> • Quickwrites scoring rubric 	<p><i>Note that the first time you use Quickwrites you will need to explain the purpose and the scoring rubric to your students.</i></p> <p>*To try when you teach:(during the wk of 10/20 - 10/24) Take the last 5 minutes of class to have students answer the following questions: (use the index cards you have been provided).</p> <ol style="list-style-type: none"> 1. Explain a concept or skill that you learned today 2. What part of the concept or skill remains unclear? <p>HW7: Teaching Activity</p> <ul style="list-style-type: none"> • Score Quickwrites <p>Due: 10/31 bring all the scored Quickwrites to class</p> <p>Classroom Observation 2 - 101 & 130 TA's Complete classroom peer observation #2 during the upcoming week (Oct 20-24).</p>

	Classwork	Homework
10/24	No class	<p>HW8:Teaching Activity (during the wk of 10/27 - 10/31) Complete a peer teaching evaluation. using the "Modified" Observation Protocol. Download a copy from BBL.</p> <p>Due Oct 31 (email by the start of class) and bring a <u>paper copy to class.</u> Be prepared to meet with the person you have observed to provide some constructive feed back in class on 10/31.</p>
10/31	<p>Activity:</p> <ul style="list-style-type: none"> Peer feedback In class reading, <i>Active learning: cooperative, collaborative, and peer learning</i> <p>From: McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers (Ch. 16)</p> <p>Discussion:</p> <ul style="list-style-type: none"> Formative assessment strategy (whiteboards) 	<p>*To try when you teach: Whiteboards (during the wk of 11/03 - 11/07)</p> <ul style="list-style-type: none"> Ask a <u>formative</u> assessment question <p>HW9: Teaching activity Photograph two whiteboards and email them to me along with a brief explanation to justify the score they received (3, 2, or 1).</p> <p>Due: 11/07 <u>by Thursday evening.</u> I will need to <u>print them out for class.</u> If you teach early Friday morning just email them to me soon as you can.</p>
11/07	<p>In class reading & discussion: <i>Laboratory Instruction: Ensuing an Active Learning Experience</i></p> <p>From: McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers (Ch. 20)</p>	<p>*To try in lab: (during the wk of 11/10 - 11/14) Use a strategy of your choice to target a classroom management concern or area of students learning you would like to improve.</p> <p>HW 10: Teaching reflection Questions are posted on BBL.</p> <p>Due: 11/14(email by the start of class)</p>

	Classwork	Homework
11/14	<p>In class reading & discussion:</p> <ul style="list-style-type: none"> • <i>Teaching Thinking</i> <p>From: McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers (Ch. 24)</p>	<p>HW 11: Design a review for the lab final (Draft)</p> <p>Start a draft of the test review you will be teaching in a couple of weeks. The outline should include a bulleted list that includes:</p> <p><u>Content</u></p> <ul style="list-style-type: none"> • Key concepts that will be reviewed <p><u>Pedagogy</u></p> <ul style="list-style-type: none"> • How you will organize the structure of the review • Strategies to target each of your semester teaching goals <p><u>Assessment</u></p> <ul style="list-style-type: none"> • Develop 2 summative assessment questions using Bloom's Taxonomy <p>Due: Bring a draft to class on 11/21, the final version is due December 05.</p>
11/21	<p>Activity:</p> <ul style="list-style-type: none"> • Review, discuss and revise the review format and teaching strategies for the final lab review. 	<p>To do: Peer classroom observation #3 (during the week of Dec. 1-5)</p> <ul style="list-style-type: none"> • Videotape the first 25 - 30 minutes of the lab you teach <p>Reminder- Final version of the lab review is due December 05 (email a copy)</p>
11/24 - 11/28 Thanksgiving break		
12/05	<p>No class</p>	<p>HW12: Classroom observation write-up #3.</p> <p>Due: December 12 (email by the start of class) and bring a paper copy to class.</p> <ul style="list-style-type: none"> • Be prepared to meet with the person you have observed to provide some constructive feed back in class on 12/12. Review the handout, <i>Classroom Observation Guide</i>, from 8/29
12/12	<p>Class Activity:</p> <ul style="list-style-type: none"> • Peer classroom observation feedback <p>Handout</p> <ul style="list-style-type: none"> • Teaching portfolio guidelines 	<p>Culminating Activity: work on your final project.</p> <ol style="list-style-type: none"> 1. Self-critique of final teaching video 2. Teaching portfolio <p>Due: final's week</p>
Final's week	The final project is due in class. Please submit on a flash drive. The day and time TBA	