
Please find the course schedule containing updates with course materials [here](#)

Course Description

This is a semester-long course aimed to help you develop your teaching goals and practices. It will expose you to a survey of pedagogy-related topics, with an emphasis on interactive engagement and reflection. The course will meet once a week and is designed to minimize work outside of class time. It is intended for graduate students in the life sciences and adjacent fields.

Prerequisites

This course is designed with first-year PhD students in mind but is open to any PhD student in the life sciences. No prior pedagogy coursework or teaching experience is assumed.

Learning Goals

The goal of this course is to prepare you for your first (or next) semester of teaching a life sciences course section, with specific examples drawn from Molecular & Cellular Biology courses. By the end of this course, you will:

- be familiar with key pedagogy-related topics
- have a basic toolkit of teaching strategies you might use or modify moving forward
- have a foundation for developing your own teaching philosophy

Grading and Assignments

This course is graded on a satisfactory/unsatisfactory basis. Please reach out if you find you are having trouble in the course or need extra accommodations due to extenuating circumstances. Rubrics for all non-survey assignments will be available on Canvas.

To receive a satisfactory grade in the class, I ask that you:

- attend all classes and arrive on time
- come prepared to engage in activities and discussions
- complete all assignments for the course

Assignment (& number of each assignment)	Points	% of Final Grade
Attendance and participation	80	40%
Course Surveys (2)	5 each	5%
Homework (6)	5 each	15%
Microteaching (3)	20 each	30%
Observation (1)	10	5%
Lesson Plan (1)	10	5%

Attendance: The primary component of the course is in-class activities and discussions intended to help you develop and practice teaching strategies. To make class productive and facilitate your learning, regular attendance and participation is important. You are permitted one unexcused absence without impacting your grade.

Course Surveys: There will be a pre-course survey shared with you during the first week of class and a post-course survey shared the week of our final class. These surveys are to help measure whether course goals are achieved and to highlight areas for improvement in course design for future years. Your honest answers and feedback are invaluable to making current and future iterations of the course meet your needs.

Homework: There are six homework assignments in total. These each take the form of a one- or two-question assignment to help you prepare for an upcoming activity or reflect on a previous one. There are additional optional readings from the book *The Missing Course* (TMC), which are intended to supplement your learning experience should you like to read more into any topic.

Microteachings: We will have three microteaching sessions – one near the beginning of the course, one in the middle, and one near the end. This gives you three opportunities to practice designing and delivering a mini lesson. It also gives you a chance to reflect and implement feedback from each microteaching session. Each microteaching will have a specific focus (boardwork, engagement, etc.) that you are encouraged to think about while you prepare. You are also encouraged to prepare for these sessions with each other.

Observation: You will be asked to complete one observation of another class or section taught by a TF this semester. Ideally this will be for a class you are interested in teaching, but you can choose any biology-related course to observe. Since this takes place outside of our class time, you will receive credit based on completion of observation notes and a brief reflection.

Lesson Plan: You will be asked to prepare a full lesson plan for your first section meeting as a TF. You will have access to real section materials for several MCB courses to choose from. You are also encouraged to reach out to course heads or TFs for materials if you’d like to prepare a lesson plan for a different course.

Course Policies

Class Absences

Attendance is vital to this course, both for your own learning and for the interactive environment of the class. You are permitted one unexcused absence without impacting your participation grade. If you need to miss class, please email me as early as you are able. Since this course is focused on in-class activities and discussions, excessive lateness or absences may result in an unsatisfactory grade.

Late Assignments

Late assignments will be accepted up to two days after the deadline if you let me know before the due date that you will need an extension.

Academic Integrity

You are encouraged to collaborate in class and to exchange ideas or feedback on work for this course. Remember to cite any contributions or external sources. We will follow the Harvard FAS Honor Code for all assignments:

Members of the Harvard College community commit themselves to producing academic work of integrity – that is, work that adheres to the scholarly and intellectual standards of accurate attribution of sources, appropriate collection and use of data, and transparent acknowledgement of the contribution of others to their ideas, discoveries, interpretations, and conclusions. Cheating on exams or problem sets, plagiarizing or misrepresenting the ideas or language of someone else as one’s own, falsifying data, or

any other instance of academic dishonesty violates the standards of our community, as well as the standards of the wider world of learning and affairs.

Inclusivity

I hope to foster a sense of community in our class. I welcome individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations, age, physical or intellectual ability “ and any other visible or nonvisible differences. You should be treated with respect in this classroom and feel that your experience and point of view are valued. To help accomplish this:

- If you prefer a name and/or pronouns that differ from those that appear in the class roster, please let me know!
- If you feel like your performance in the class is being impacted by your experiences outside of class, please reach out to me. I want to be a resource for you. You can also submit anonymous feedback at any point through the anonymous feedback link posted on the course Canvas page.
- If you ever feel something was said or done in class (by anyone) that made you feel uncomfortable, please reach out to me (or submit anonymous feedback).

Accommodations for Disabilities

You are welcome and encouraged to request any necessary accommodations. Please present your Faculty Letter from the Disability Access Office (DAO) to the instructor as soon as you are aware of the accessibility need. All discussions will remain confidential among the student, instructor, and DAO.

Course Schedule

Week	Topic	Due
Jan 23	Course Introduction: MCB327 and teaching at Harvard	None
Jan 30	Lesson planning: Learning goals and planning a section	Homework 1 Finish pre-course survey TMC Introduction
Feb 6	Microteaching 1: Your hobby	Prepare your microteaching
Feb 13	Active Learning: Strategies for engaging student participation	Homework 2 TMC Ch. 1 (optional)
Feb 20	Inclusive Teaching: Equitable and inclusive teaching practices	Homework 3 TMC Ch. 7 (optional)
Feb 27	Grading & Feedback: Written and verbal feedback strategies	Mid-semester feedback survey TMC Ch. 5 (optional)
Mar 5	Microteaching 2: Your science	Prepare your microteaching

Mar 12	<i>Spring Break</i>	None
Mar 19	Observe a current TF <i>No in-person class</i>	Observation Notes
Mar 26	Case Studies: Navigating difficult scenarios in the classroom	Observation Notes
Apr 2	Lesson planning revisited: Choosing a course and planning your lesson	Homework 5 Observation Notes TMC Ch. 8 (optional)
Apr 9	Microteaching 3: Your course	Homework 6 Prepare your microteaching Lesson plan
Apr 16	MCO information session: Choosing a course and preparing to teach	Homework 7 Post-Course Survey
Apr 23	No class	

TMC = *The Missing Course*, David Gooblar, 2019