

Graduate and Undergraduate Student Instructor Orientation (GUSIO) Sessions

This year's GUSIO sessions will be offered remotely using three different formats.

Three of our session topics will only be offered via an **online module** via the Open Learning Initiative. Students will complete individually these modules, at their own pace, before the start of classes. Online modules will open on **Monday, January 18 and close on Monday, February 15**. Online Learning Initiative modules each take approximately 90-120 minutes to complete.

The other three session topics will be offered **live via Zoom** (see times listed below). Live Zoom sessions are 90 minutes. For those students who are unable to attend the live sessions (e.g., time zone conflict), they can view **Zoom recordings** of the sessions and complete each session's active learning components in Canvas. Students will have until **Monday, February 15** to complete make up activities.

As in previous years, we encourage you to ask students to attend the sessions that will be most relevant to their teaching context. In the session descriptions below, we've noted the intended audience as well the learning objectives. All of our sessions will feature strategies that are applicable to the wide variety of teaching environments that graduate student instructors may teach in this fall (e.g., online, classroom, hybrid remote).

Open Modules via the Online Learning Initiative (OLI)

Grading and Delivering Feedback (online modules only, no live Zoom session available)

- a. ...on Quantitative Assignments (Problem Sets, Code, etc.)***
- b. ...on Writing Assignments (Papers, Lab Reports, etc.)***

Audience: Graders, Instructors of record, TAs who facilitate recitation/lab/discussion/studio sections

Description: How can you grade efficiently, effectively, and fairly? How can you simultaneously give your students feedback that will maximize their learning? These online modules will focus on evidence-based strategies for grading and providing feedback on: (a) quantitative work, such as problem sets and code OR (b) writing assignments or short-answer exam questions. In both modules, participants will discuss the relationship between grading and feedback, strategies for grading efficiently and fairly, the characteristics of effective feedback, and research on the impacts of different types of feedback on student learning. Through practice exercises, participants will practice analyzing and improving examples of feedback on student work. Participants will also practice grading and providing feedback using rubrics. Note: these online modules are similar, with the main difference being the type of examples featured. We recommend requiring one of these modules per student due to the large amount of overlap.

Learning Objectives:

- Identify characteristics of effective feedback.
- Use a rubric to grade student work and provide feedback to improve student learning.
- Describe strategies for grading effectively, efficiently, and fairly.
- Practice providing effective and efficient feedback.

Working Well One-on-One with Students (online module only, no live Zoom session available)

Audience: TAs who hold office hours, Graders, Instructors of record, TAs who facilitate recitation/lab/discussion/studio sections

Description: This online module will focus on strategies for working effectively one-on-one with students in a variety of teaching contexts, including an online environment. What strategies can you employ to best support and advance student learning when interacting with students individually during studio, lab, recitation, and/or office hours sessions? How can you handle the difficult interactions that may arise during office hours or other one-on-one interactions? Participants will explore and apply effective approaches and campus resources to support you and your students, and will practice putting these strategies to use.

Learning Objectives:

- Identify challenges and benefits of working with students one-on-one.

- Practice strategies for interacting effectively with students one-on-one to advance their learning.
- Describe appropriate responses to problematic or difficult interactions arising during office hours or other one-on-one interactions with students.

Live Zoom Sessions (all held on Thursday, August 27)

Creating a Welcoming and Supportive Climate from Day One (live/recorded Zoom session) (Friday, January 29, 2021, 11:00-12:30 EST)

Audience: Instructors of record, TAs who facilitate recitation/lab/discussion/studio sections

Description: Whether you have taught before or this is your first time teaching, this session will help you create an inclusive classroom climate from the start of your course. You will explore strategies for: (1) getting to know your students; (2) calibrating your instruction to CMU students; (3) creating a classroom climate that welcomes and supports learning for all students; (4) setting appropriate expectations; and (5) motivating and engaging students with course content from day one. Session activities will include application of strategies to remote and hybrid teaching formats.

Learning Objectives for Seminar:

- Recognize diversity of student backgrounds and cultural norms for teaching at CMU.
- Acquire strategies for getting to know your students.
- Develop strategies for establishing credibility, authority, and expectations, while balancing approachability.
- Explain connections among student learning, motivation, and classroom climate.
- Identify and implement strategies for creating an inclusive classroom environment that supports learning for all students.

Conducting Productive and Engaging Discussions (live/recorded Zoom session) (Friday, January 29, 1:00-2:30 EST)

Audience: Instructors of record, TAs who facilitate recitation/lab/discussion/studio sections

Description: How can you design effective discussion activities for your students? What facilitation strategies maximize student participation, engagement, and learning outcomes? Participants will learn about the factors that influence student learning and engagement during discussions and acquire a toolkit of active learning methods for structuring productive discussions. Through hands-on activities, participants will practice strategies for both designing and facilitating effective discussion activities, such as designing discussion questions, selecting discussion activities aligned with learning objectives, and identifying facilitation strategies to address common concerns about student participation and teaching inclusively. Session activities will include application of strategies to remote and hybrid

teaching formats.

Learning Objectives for Seminar:

- Acquire a toolkit of active learning techniques for structuring discussion activities.
- Describe effective strategies for preparing for and facilitating discussions.
- Practice designing effective discussion questions.
- Identify teaching strategies for overcoming challenges associated with conducting discussions, such as fostering student participation and teaching inclusively.

Teaching Problem Solving in Recitations (live/recorded Zoom session)
(Friday, January 29, 3:00-4:30 EST)

Audience: Instructors of record, TAs who facilitate recitation/lab sections

Description: Leading a recitation section can be very different than teaching a large course or lecture. Recitations provide students the opportunity to practice solving problems and discuss questions about course material outside of lecture, often in a smaller group setting. This provides both benefits and challenges to TAs or instructors leading recitations. In this session, we will discuss learning goals for recitations and how to design sessions that help students achieve those goals, explore strategies for promoting student engagement and activity during problem-based recitation sessions, and look at research on how to best coach students through example problems. Session activities will include application of strategies to remote and hybrid teaching formats.

Learning Objectives for Seminar:

- Define “alignment” between learning objectives, assessments, and teaching methods, and generate a learning objective specific for a problem-based recitation.
- Recognize opportunities for practice and feedback that occur in one’s course(s).
- Define “active learning”, explore a menu of strategies for implementing active learning, and choose an activity that is well-aligned with an objective.
- Discuss how to facilitate worked examples most effectively based on research.

***NOTE:** For any graduate student who is unable to attend the live Zoom sessions, we will post session recordings via Canvas. Graduate students will be able to view the recordings and complete the accompanying active learning activities in Canvas.