Graduate & Undergraduate Student Instructor Orientation (AY 2022-23)
The following seminars will be offered as asynchronous, interactive, online modules. These are the same sessions that have been offered at past GUSIO events. Access to the modules will be provided via Canvas. Students can begin registering for GUSIO in August 2022, and registration and participation in GUSIO will remain open for the academic year.

Grading and Delivering Feedback
      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

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.

Creating a Welcoming and Supportive Climate from Day One

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.

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

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.

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

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.

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.