Can I make my teaching more inclusive? What are the types of online courses? What should my role be in an online course? How do I foster a community of inquiry? How do I know what students are learning? How do I assess my teaching? What does a learner-centered classroom look like? How do I design a curriculum? Can classroom technology impact learning? What makes for a good mentor?

**BASICS OF ONLINE LEARNING AND TEACHING**

Don Gillian-Daniel, UW-Madison  
Colleen McLinn, Cornell University  
2 CREDITS | Wednesdays 11:00-12:30 ET

This course is aimed at graduate students and postdocs currently teaching online or planning to in the future. It includes asynchronous readings and assignments as well as synchronous meetings for peer review of course materials you develop. Topics include: advantages of online learning, effectiveness of various approaches, types of online courses, principles of good practice, the online learner's role, and cultivating communities of inquiry.

**THE COLLEGE CLASSROOM**

Peter Newbury, UC San Diego  
1 CREDIT | Thursdays 1:00 - 2:30 ET

Participants will learn the basics of effective teaching as well as ideas at the forefront of college education. Students will explore their teaching philosophy, design a course curriculum, learn how to monitor and investigate effectiveness of the learning environment, and explore what it means to create an inclusive classroom environment that engages all learners. An emphasis on a learning-centered classroom will provide participants with a perspective that highlights the interconnected cycle of teaching, assessment, and learning such that they become reflective practitioners, viewing their classroom as sites for ongoing research into their own teaching.

**EFFECTIVE TEACHING WITH TECHNOLOGY**

Robert Linsenmeier, Northwestern University  
Stephan Roth, University of Maryland-College Park  
Sabrina Kramer, University of Maryland-College Park  
1 CREDIT | Mondays 3:00 - 4:30 ET

Instructors have many choices of technologies (e.g., clickers, online homework platforms, learning management systems, simulations and modeling) to enhance traditional methods of communication and assessment, but there can also be challenges in adopting new technologies. This course will focus on rationales for choosing to use particular technologies, and how they support broader learning objectives, based on pedagogy literature. Assignments will include readings, discussions, and investigation and presentation of a learning technology.

The Center for the Integration of Research, Teaching, and Learning (CIRTL) is an NSF Center for learning and teaching in higher education. CIRTL uses graduate education as the leverage point to develop a national STEM faculty committed to implementing and advancing effective teaching practices for diverse student audiences as part of successful and varied professional careers.
RESEARCH MENTOR TRAINING
Bennett Goldberg, Boston University
Claudia Vergara, Michigan State University

Seminar participants will work with a community of peers to develop and improve their mentoring skills. By the end of this class, participants should be able to clearly articulate a mentoring philosophy to those inside and outside of their discipline and have developed strategies for dealing with mentoring challenges. In this course, participants will explore both sides of the mentor/mentee relationship and developing transferable skills, competencies, and self-efficacy, whether they are mentors for early graduate students or undergraduates in their labs, or mentees working with their faculty advisors.

THE SCHOLARSHIP OF TEACHING AND LEARNING II
Steven Freeman, Iowa State University

This course focuses on the implementation and analysis of a classroom-based Teaching as Research project, with emphasis on practices suitable for technology, engineering, and related disciplines. Students will consult with instructors as they collect and analyze data and complete their projects, and then publicly share their results. Prior participation in the Scholarship of Teaching and Learning I or permission of the instructor is required.

ONLINE HOMEWORK: A PRACTICAL GUIDE
Vicki Roth, University of Rochester
Wendi Heinzelman, University of Rochester

Many of us don't have especially fond memories of completing our problem sets as students. As instructors, we are often strapped for time in setting up or grading them well. Online homework or assignment systems have distinct advantages: well-stocked problem libraries, individualized assignments, immediate feedback to students, and the freeing up of instructor time. This short course is intended to provide a highly practical guide. Participants will meet for four synchronous discussion sessions, and asynchronously continue learning about the features of homework systems and practice essential elements within an online sandbox.

CIRTL READS JOURNAL CLUB
Lorine Giangola, University of Colorado, Boulder

CIRTL Reads is a cross-Network scholarly discussion of recent peer-reviewed STEM education and pedagogy research. During spring 2015, participants will read and critique a selection of Teaching-as-Research studies and other papers that examine a variety of pedagogy topics, including diversity and learning communities in STEM. Students are welcome to participate in the semester-long series, or to drop in for select sessions.

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