Preparation for the STEM Classroom: An Introduction to Evidence-Based STEM Teaching

Designed for PhD students and Postdocs planning for academic careers in the STEM disciplines, this course provides an introduction to the alignment model, evidence-based teaching practices, and the basics of teaching-as-research (TAR) project design. Interested faculty are also welcome to join.

Graduate and professional students, postdocs, and faculty can participate in this course by either registering for graduate credit using one of the courses listed below, or by auditing the course (not taken for graduate credit) using the link below.

Cross-Listed as:
- ENGR 3001-1160 (CRN #21925)
- BIOSC 3001-1160 (CRN #22972)
- CHEM 3001-1095 (CRN #24063)

Audit (Not for Credit) Registration

Complete this form to participate without credit or if you also plan to register for graduate credit:
https://forms.gle/76GTvuK9ecRmh2T48

Class Times:

Class meets Tuesdays, 4:00 – 4:50 PM in Benedum 320, and begins Aug 31st.

* Satisfies the course requirement to earn Pitt-CIRTL Associate Certification in STEM Teaching (1st level).
Registration for fall programming is now open! Courses and workshops have limited capacity and require advance registration; MOOCs and events have no cap but participants are still required to register to get access to online materials (for MOOCs) and sessions (for events).

Check [https://www.cirtl.net/](https://www.cirtl.net/) for updates.

**New Workshop Series**

*Fostering Antiracist Student Learning Experiences*

Explore frameworks to unpack systemic racism, hear from faculty and grad students who have fostered their own sustainable antiracist teaching practices, and reflect on your own ability to build an equitable learning environment in this four-part CIRTLcast series.

**A Graduate Student Panel on Exploring Race, Identity & Intersectionality**
12:00 – 1:00 PM, Tuesday, September 21, 2021
Our identities as graduate students impact how we experience race in higher education, and those experiences in turn impact the teaching and research we pursue. Join us for a powerful panel discussion of Indiana University–Purdue University Indianapolis (IUPUI) graduate students reflecting on their experiences and scholarship around race, identity, and intersectionality. Bring questions and prepare to reflect on your own experiences as part of this hour-long event.

**Using Frameworks to Examine Race in Higher Education**
12:00 – 1:00 PM, Tuesday, September 28, 2021
Explore different frameworks for understanding race and identity in the first event in our four-part series on antiracist learning. With the public spotlight on Critical Race Theory, we will explore how this framework and others can help us understand the historical context of race and racism in higher education as well as steps we can take to develop a more authentic race awareness. Participants are encouraged to bring questions about these foundational concepts, and come prepared to reflect on your own identities, experiences, assumptions, and biases.

**Decolonizing the Curriculum in STEAM**
12:00 – 1:00 PM, Tuesday, October 4, 2021
Discover new approaches to teaching in the Science, Technology, Engineering, Arts, and Math (STEAM) disciplines that can elevate historically marginalized perspectives and scholarship. In this event, we’ll unpack the increasingly popular concept of decolonizing curriculum, reflect on how decisions we make as instructors can impact which voices are prioritized, and explore ways to incorporate our students into these types of ethical and moral considerations.

**A Faculty Panel on Strategies & Practices For Antiracist Classrooms**
12:00 – 1:00 PM, Tuesday, October 11, 2021
Join us for a multidisciplinary panel discussion of faculty who have incorporated various antiracist approaches into their teaching at IUPUI. We’ll hear from Dr. Marilee Brooks-Gillies, an Assistant Professor of English who has developed antiracist writing and assessment practices; Dr. Jamie Levine Daniel, an Associate Professor in the O’Neill School of Public and Environmental Affairs and a specialist on anti-semitism in higher education; Dr. Ronda Henry Anthony, an Associate Professor of English and Africana Studies who has led several IUPUI initiatives on antiracism; and Dr. Michin Hong, an Associate Professor of Social Work with a research focus on anti-Asian racism and IUPUI’s Asian American student community.
Network Workshop Series

Workshop Series: Exploring Careers in Teaching at a Community College
Learn about teaching at community colleges straight from current staff & faculty! In this three-part series, we'll hear faculty & staff reflect on the joys and challenges of teaching at a community college, the broad diversity of students in their courses and how that diversity enhances learning, and the ins and outs of finding a full-time teaching position at a community college. The panelists will take questions from future faculty throughout the presentation.

Introduction to Teaching at a Community College
1:00 – 2:30 PM, Tuesday, October 5, 2021
Have you ever considered a teaching career at a community college? This career can have a high impact on students beginning their higher education journey and often includes a strong community focused work environment. The panel of faculty will discuss their experiences working in community colleges. The discussion will include equity and diversity at community colleges, panelists career trajectories, what they appreciate most about working at community colleges, and common misconceptions about the career. Bring your questions and prepare to explore this wonderful career path.

Getting Hired at a Community College: Tips and Strategies from Faculty on Hiring Panels
1:00 – 2:30 PM, Tuesday, November 2, 2021
Learn hiring tips from faculty that serve on or work closely with hiring committees at community colleges. How might the interview differ from that of a 4-year teaching or research university? What factors should you consider in preparing your application materials and teaching demonstration? What are some common do's and don'ts of seeking a job at a community college? Join us to learn the answer to these questions and more.

Equity, Diversity, and Inclusive Teaching in the Community College Setting
1:00 – 2:30 PM, Tuesday, December 7, 2021
Community colleges are truly diverse settings, attracting individuals from all different walks of life with a common interest in advancing their education. If you are interested in exploring a career at a community college, then understanding the diversity of their student populations is crucial. This panel consisting of faculty and administrators from various community colleges will share insights on student diversity. We will also explore the types of inclusive teaching strategies that best support community college students and help to create more equitable classrooms.
Teaching Citational Practice: A Critical Feminist Approach (2 day workshop)
11:00 AM – 12:30 PM, Wednesdays, October 13 and October 27, 2021
What effects do citational practices have on students’ understanding of who does and doesn’t belong in our field? What is the impact of the ‘stories’ we tell our students through our syllabi, footnotes, and bibliographies? How can we transform our own citational practice in order to empower the most vulnerable or excluded voices in our fields? In this two-part workshop, we will explore how, as educators, we can meaningfully legitimize overlooked or non-traditional sources of scholarship while breaking down biased norms of who belongs in labs, at the front of the lecture hall, and in our syllabi. In our first session, we will introduce critical feminist pedagogy as a framework for assessing the political and ethical implications of academic citation, both generally speaking and in your home departments and disciplines. In our second session, you will develop and workshop a pedagogical resource for enacting a critical-feminist approach to citational practice in your own classrooms and learning materials. If you are interested, at the end of the workshop you’ll be able to contribute your newly-designed resource to a STEM-focused issue of the Open Educational Resource (OER) Teaching Citational Practice: Critical Feminist Approaches, hosted by Columbia University Libraries.

NEW!!
Understanding Levers of Change in Academia (2 day workshop)
12:00 – 1:30 PM, Wednesdays, November 10 and 24, 2021
Enacting change in big, complex institutions is a daunting task - especially for grad students, postdocs, and early career faculty - and knowing the levers of power on your own campus is an essential first step. In this two-part workshop, participants will do a deep dive into the structural aspects of change (regimented processes, deadlines, and rules) and the social components of power in higher education (key stakeholders, institutional culture, and unspoken norms). We'll explore how to conduct a stakeholder analysis and build a mock stakeholder map to understand how to advocate for change around a particular issue.

Massive Open Online Courses (MOOCs)

CIRTL MOOCs take place on the EdX platform and use video-based modules, discussion boards, and peer-reviewed assignments to teach participants about different aspects of evidence-based STEM teaching over the course of 8 weeks. Registration is required; there is no cost to participate and no enrollment cap. For more information, visit the CIRTL MOOC website.

An Introduction to Evidence-Based Undergraduate STEM Teaching MOOC (Registration TBD)
Asynchronous Course September 27-November 21, 2021
The course draws on the expertise of a variety of STEM faculty, educational researchers, and staff from university teaching centers, many of them affiliated with the CIRTL Network. Topics include key learning principles, such as the role of mental models in learning and the importance of practice and feedback; fundamental elements of course design, including the development of learning objectives and assessments of learning aligned with those objectives; and teaching strategies for fostering active learning and inclusive classroom environments. Formats include video content and transcripts, readings, discussion forums, quizzes, and peer-graded assignments where participants will plan teaching and learning activities relevant to their disciplines.
Network Workshops

**Research, Teaching, and Mentoring at MSI/HBCUs**
3:00 – 4:30 PM, Thursday, October 7, 2021
Hear faculty from Minority Serving Institutions (MSIs) and Historically Black Colleges and Universities (HBCUs) share their perspectives on being faculty at different types of institutions that serve diverse student populations. Each faculty panelist is associated with a partner institution as part of the Institutional Research and Academic Career Development Awards (IRACDA) Program funded by the National Institutes of Health (NIH). Faculty names and affiliated institutions will be added as they are identified.

**Bring An Inclusive Mindset to Your Teaching**
11:00 AM – 12:30 PM, Friday, October 8, 2021
Learn about inclusive teaching approaches that build upon inclusive design frameworks, case studies, and educational research in this one-session workshop. As an introduction to inclusive teaching techniques, Professors Kelly Hogan and Viji Sathy of the University of North Carolina will ask participants to reflect on inequities and diversity in their classrooms through interactive activities. After providing a framework for inclusive design and their own research results, Hogan and Sathy will lead participants through active learning exercises and case studies that explore inclusive techniques. Drawing upon their own teaching experiences and educational research, they will model and discuss approaches that can be readily implemented with any discipline or class size to help all students achieve to their potentials.

**LinkedIn for Academics**
12:00 – 1:30 PM, Tuesday, October 12, 2021
You have a LinkedIn account and the basics set up; now what? Wait for people to find you? No. “Networking” is an active process that takes time and planning. After attending this workshop, you will understand: 1) Why LinkedIn is used for the recruitment and vetting of candidates 2) The importance of skills and keywords and how they are essential to your LinkedIn profile 3) How to reach out to an individual on LinkedIn 4) Begin to appreciate the many ways to use LinkedIn for networking and job-seeking 5) How faculty/academia can use LinkedIn for network.


**dB-SERC Lunch Discussion**
12:00 - 1:00 PM, Monday, September 13, 2021
Dr. Jeremy Levy and Dr. Kevin Binning from the Physics and Psychology Departments will give their second talk about their course transformation titled "Delivering Ecological Belonging Intervention Via Video".
Check [https://teaching.pitt.edu/workshops-events/](https://teaching.pitt.edu/workshops-events/) for updates.

**Developing a Lesson Plan**  
10:00 - 11:30 AM, Tuesday, September 14, 2021  
What does it mean to be prepared for class? The best teaching comes about from planning ahead for a class session. A detailed description of instructional activities for each class provides a roadmap for the instructor and structure for the students. It can also help you determine how well class goals have been met.

**Video Production & Editing Office Hours**  
10:00 AM - 4:00 PM, Tuesday, September 14, 2021  
10:00 AM - 4:00 PM, Wednesday, October 13, 2021  
Drop into the office hours anytime to consult with an expert video producer on video production and editing, audio for video, lighting, or scriptwriting. Whether you are an instructor, content creator, or novice videographer, you’re welcome to stop by and get all your video questions answered! Our video expert will be available 10:00 a.m.–4:00 p.m. on the Ground Floor of Hillman Library, just outside the Open Lab @Hillman.

**Provost’s Fall Workshop Series on Student Success: Session Two**  
12:00 - 1:30 PM, Tuesday, September 14, 2021  
The University Center for Teaching and Learning in collaboration with the Office of the Provost presents a series of virtual workshops on Student Success for the fall 2021 term. We know Pitt faculty are committed to the welfare and success of your students. Sometimes, putting these ideas into practice can be challenging and complex. Given the demographics of our students are changing at Pitt, we aim to provide practical tools to increase the efficiency of your daily work in your interactions with students. Join us in conversations to support all students as we return to campus this fall.

**Encouraging Student Participation**  
1:00 - 2:30 PM, Wednesday, September 15, 2021  
Effective class discussions – much like effective lectures – are the result of careful planning. Students must do their part by coming to class ready to participate.

**The Grading Process and Providing Effective Feedback**  
11:00 AM - 12:30 PM, Friday, September 17, 2021  
Grading student work is a process that, with some instructor planning, produces data that both students and instructors can use to improve student learning. This introductory-level, virtual workshop will introduce you to types of student assessments and the steps in the grading process. Employing the alignment model, you will have the opportunity to evaluate an assignment prompt and practice offering effective feedback. We will briefly discuss models of grading, including grading on a curve. Although this workshop will be pedagogy-focused, we will reserve some time in the end to address technology questions.

**Designing Rubrics**  
2:00 - 3:30 PM, Monday, September 27, 2021  
Asking students to perform authentic, complex tasks can provoke higher-level learning, but how can we assess a complicated assignment when it has no “correct” answer? Using rubrics can help you assess the seemingly unassessable. Rubrics also help clarify and communicate your expectations to your students and make for a simpler, faster, and fair grading process. In this introductory-level workshop, we’ll present different types of rubrics, review rubric design best practices, and guide you through the process of beginning to create a rubric to use in their courses. This workshop is pedagogy-focused but will include a brief demonstration of how to create and apply a rubric in Canvas.
Maximizing Mentee Experience
3:00 - 4:30 PM, Wednesday, September 15, 2021
Mentoring relationships are an essential part of any career journey but they are not always easy to navigate, particularly in the role of the mentee. During this session, we will provide you with guidance regarding how to cultivate a mentoring network, what it means to be a mentee, how to identify and cultivate new mentors, what makes for a successful mentor/mentee relationship, and how to manage a multitude of difficult situations that may arise in these relationships.

This session will be interactive, so please be sure that you are in an environment that will allow you to engage verbally and come prepared with any questions you may have!

Center for
Doctoral and Postdoctoral Career Development

Check [https://calendar.pitt.edu/department/office_of_academic_career_development](https://calendar.pitt.edu/department/office_of_academic_career_development) for updates.

First Gear Commercialization Course
3:00 - 5:30 PM, Thursdays, September 2 – October 21, 2021
First Gear is the Innovation Institute's premier introductory commercialization program. Through a series of six workshops, participants discover the commercial potential of their innovation by conducting interviews with potential customers.

An experienced business mentor helps guide this process which results in the creation of a value proposition for the innovation and a polished pitch for potential investors or license partners.

Each team receives $3,000 to assist in market research and customer discovery.

Leading People In Organizations Micro-Credential
Application deadline: September 7, 2021
Classes begin Tuesday, September 7, 2021.

This professional credential consists of four Master of Business Administration (MBA) courses. Gain the knowledge and skills that are needed to thrive in any career, as well as the verification that you’ve earned them.

Cultivating a portfolio of professional skills during your postdoctoral training will provide you with a significant competitive advantage over your peers when you are ready to enter the job market, regardless of your career goals.

Micro-credentials are cost-effective, mini-qualifications that offer immediate value!

This professional credential will introduce emerging scientists and scholars to the essential managerial and communication skills valued and sought after by employers across all sectors of the workforce. The certification of the completion of this professional credential is provided by University of Pittsburgh Katz Graduate School of Business (KGSB).

If you have any questions, email OACDGradCourses@pitt.edu or call (412) 648-8486 to speak with an advisor.
Check [https://www.diversity.pitt.edu/](https://www.diversity.pitt.edu/) for updates.

**Racial Equity Consciousness Institute (RECI) Cohort**

*See link for schedule*

The Racial Equity Consciousness Institute—facilitated via a series of immersive, learner-oriented review and dialogue modules, takes a multifaceted approach to contemplating race and racism—focally, anti-Blackness. The Institute engages participants through a referential and constructive framework to analyze the complexity and pervasiveness of racism, and reflect on what they can do, individually and collectively, to advance racial equity in their institutions and communities.

Through the institute, participants explore and engage six bilateral spheres of racial equity consciousness development in efforts to expand capacity to seek, consider, and adopt different perspectives; promote personal growth and empowerment; enhance cultural humility, cultural competence, and cultural agency; and ultimately, embody the mindset to foster antiracist practices, cultures, and communities.

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### Additional Resources:

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