Teaching and Learning Professional Development Certificate Mini-Course

Program Objectives

This course is available to all faculty across disciplines seeking to strengthen their teaching techniques. In this professional development certificate mini-course, faculty will experience teaching practices designed to improve student learning. In interactive online sessions, participants will read, discuss, and apply a variety of teaching techniques as active participants in the course. Exploring concepts and information introduced in the course, participants will develop a teaching demonstration (non-lecture-based) that could be taught in a college course.

Participants will…

1. Understand principles and application of teaching practices supported by research literature.
2. Explore ways in which research-based teaching principles can be used to enhance student classroom experience.
3. Identify and apply inclusive and equitable teaching practices to create a classroom environment that supports learning for all students.
4. Using the principles practiced in the course, develop and teach a non-lecture-based teaching activity.

Sessions and Goals: All sessions take place 5-7 PM (US Pacific Time) (Time Converter)

Session 1: Backward Design   April 20
Understand the principles of backward design to develop course goals and learning outcomes to improve course alignment.

- Select topic for your Teaching Demonstration.
- Write broad learning goals for student learning in the topic.
- Write specific and measurable learning objectives aligned to the learning goals
- Revise your topic, goals, and objectives based on what you learn in class.

Session 2: Equity and Inclusivity   April 27
Understand ways to improve inclusive learning environments.

- Discuss the complexities of teaching to diverse student populations.
- Develop a plan to create an inclusive classroom learning environment.
- Integrate equity and inclusivity into your Teaching Demonstration.

Session 3: Authentic Assessment   May 4
Learn strategies to monitor students learning and provide feedback during class time.

- Write specific summative assessments aligned to the goals and objectives.
- Revise your summative assessments based on what you learn in the course.

Session 4: Creating an Active Learning Environment · May 11

Experience and practice developing classroom opportunities for students to actively develop practical skills.

- Develop formative assessments that include inclusive teaching practices.
- Revise your formative assessments based on what you learn in the course.
- Put all of the elements together to create a Teaching Demonstration.

Session 5: Teaching demonstration · May 18

Create an active (non-lecture-based) classroom activity and teach it to the group.

- **Purpose:** Participants will practice applying the principles from the Teaching Certificate Course in development of a 10-min non-lecture Teaching Demonstration classroom activity and poster.
- **Skills practiced:** Participants practice creating inclusive classroom environments through writing learning goals and learning outcomes then aligning them with summative assessments, formative assessments and active learning.
- **Knowledge gained:** Participants practice applying the teaching principles from the course sessions. Participants knowledge about these topics are enhanced by practicing development of a Teaching Demonstration that puts these elements into practice while receiving guidance from a facilitator and peer feedback.

Website: https://www.apru.org/event/teaching-and-learning-professional-development-certificate-mini-course/
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About Elly Vandegrift

Elly Vandegrift is the Program Director for Global Science Education Initiatives and Senior Instructor II in the Global Studies Institute at the University of Oregon. She has been a higher education biology instructor and led science education professional development for nearly two decades. With global partners such as King Abdullah University of Science and Technology (KAUST), Mohammed Al-Mana College of Health Sciences (MACHS) <remove hyperlink>, and the Association of Pacific Rim Universities (APRU) she develops and facilitates customized STEM education programs. As recognition of her teaching excellence, Elly has received four university and national pedagogy awards selected by her peers. Elly served as a member of the leadership team for the Summer Institutes on Scientific Teaching (now the National Institute on Scientific Teaching) <remove hyperlink>, an organization dedicated to providing teaching professional development for current and future faculty based on the pillars of inclusivity, active learning, and assessment. She is the author of several articles about STEM education reform and professional development.

Selected Articles:

Withers, M., M. Monfared, FM Fung, VWY Lee, CA Lucio Ramírez, MAF Mendoza, C Zhou, EVH Vandegrift (2021). Teaching in Virtual Environments: Global Educational Development to Respond to Challenges and Opportunities of the COVID-19 Pandemic. Transformative Dialogues 14(2).

Vandegrift, EVH, NC Barber, A Vitale, and T. Ward. 2020. Supporting Science Graduate Teaching Assistants and Undergraduate Learning Assistants Teaching Professional Development. Transformative Dialogues: Teaching and Learning Journal. 13(3).

Vandegrift EVH, and AJ Cavanagh. 2019. Building student literacy and metacognition through reading science in the news. CourseSource.

Vandegrift, EVH, AB Mulnix, JR Yates, and SR Chaudhury. 2018. [Workshopping a Workshop: Collaborative Design in Educational Development](). To Improve the Academy 37(2), 207-227.

About University of Oregon Global Studies Institute

The Global Studies Institute (GSI) is a unit of UO's Division of Global Engagement. GSI hosts and supports 11 of UO's internationally-oriented research centers, programs, and initiatives. Our goal is to enhance faculty research, enrich the student experience, and promote the University of Oregon's academic excellence at home and with partners around the world. In partnership with UO schools and colleges, GSI encourages interdisciplinary and cross-regional research, curriculum development, and community outreach.

The University of Oregon is a member of the [Association of American Universities (AAU),]() and [Association of Pacific Rim Universities (APRU),]() meaning it is one of the top 34 public research universities in the United States and 60 public research universities around the Pacific. Our research is unique, innovative and valuable to change the future trajectory of our students.

About APRU

As a network of leading universities linking the Americas, Asia and Australasia, APRU (the Association of Pacific Rim Universities) brings together thought leaders, researchers, and policy-makers to exchange ideas and collaborate on effective solutions to the challenges of the 21st century.

We leverage collective education and research capabilities of our members into the international public policy process. In the post-pandemic era, our strategic priorities focus on:

1. **providing a neutral platform for high-level policy dialogue,**
2. **taking actions on climate change, and**
3. **supporting diversity, inclusion, and minorities.**

APRU's primary activities support these strategic priorities with a focus on key areas such as disaster risk reduction, women in leadership, indigenous knowledge, virtual student exchange, e-sports, population aging, global health, sustainable cities, artificial intelligence, waste management and more.