

GPFF-501: Preparing Future STEM Faculty

An Introduction to Evidence-Based Undergraduate STEM Teaching is designed to provide graduate students, postdoctoral scholars, and other aspiring faculty in STEM disciplines with an overview of effective college teaching strategies and the research that supports them. This course is also suitable for other interested university staff, faculty, and administrators. The Course is designed to equip the next generation of faculty to be effective teachers, thus improving the learning experience for the thousands of students they will teach. Past participants are overwhelmingly satisfied with the course. 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 CIRT 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.

Credits: 3

Program: Grad Preparing Future Faculty