UPCOMING CANDIDATE SEMINAR

Candidate for Instructional Assistant Professor

SEPTEMBER 15, 2025

Frazier Rogers 122, 9:15 a.m.

Austin Moss, Ph.D.

ADJUNCT LECTURER
UNIVERSITY OF FLORIDA

MONDAY, SEPTEMBER 15
ROG 122 • 9:15 A.M.

ZOOM LINK: HTTPS://UFL.ZOOM.US/J/97494065511?PWD=3NCJZLEJRGK36ZY4IJWHUIEO5PNRVD.1

PASSCODE: 562732
Meeting ID: 974 9406 5511

LINK TO ZOOM:

"Designing for Understanding: Teaching Like an Engineer"

About the Seminar

Teaching is hard. Engineering professors are expected to cover complex material, reach large audiences, and maximize retention, all under tight time constraints and in classrooms where many students would rather be anywhere else. In many ways, it is an engineering challenge: designing a system that performs reliably under pressure.

In this seminar, I'll share how I approach education using the engineering design process itself: identifying root causes of student struggles, generating and testing targeted interventions, and iterating on course structure and content to improve outcomes. Drawing on my experience teaching and supporting student-driven projects, I will highlight the strategies I use to make difficult technical content more approachable. This includes breaking concepts into fundamental pieces, helping students build them back up into strong, transferable problem-solving skills, and reinforcing key ideas across multiple modes of engagement.

I will also discuss how I incorporate experiential learning into technical curricula to help students move beyond memorization and toward deep understanding and real-world application. This includes hands-on projects, context-driven teaching examples, and a classroom culture that emphasizes iteration and practical learning. Finally, I will share how these approaches support student growth not only in coursework but also in extracurricular experiences such as design teams, competitions, and professional development opportunities in interdisciplinary fields like agricultural and biological engineering.

About Dr. Austin

Dr. Moss is an Adjunct Instructional Assistant Professor in the Department of Mechanical and Aerospace Engineering at the University of Florida, where he teaches core undergraduate courses such as Mechanics of Materials. He earned his Ph.D. in Mechanical Engineering from UF, with research focused on the design of soft robotic actuators using biomimetic materials and computational mechanics. His work combines nonlinear mechanics, simulation, and material innovation to create compliant systems inspired by nature.

In addition to his teaching and research, Dr. Moss is passionate about mentoring students and developing experiential learning opportunities that connect theory to practice across disciplines like robotics, design, and agricultural applications.