

Faculty Development Workshop Series

“QUBES: Quantitative Undergraduate Biology Education and Synthesis: Integration of Quantitative Modeling”

Dr. Robert Mayes

Professor, College of Education, Southern Georgia University

This workshop will explore the integration of quantitative reasoning into undergraduate biology, sharing experiences from the QUBES Consortium. The **QUBES** project’s mission is to improve learning opportunities for all students enrolled in undergraduate biology courses by reflecting on the centrality of quantitative approaches in modern biology.

The five major QUBES initiatives include:

- *QUBES Consortium*: coordinating the efforts and resources of disparate communities invested in promoting quantitative biology education;
- *QUBES Faculty Mentoring Networks*: supporting faculty understanding and implementation of specific quantitative biology concepts and teaching approaches;
- *QUBES Hub*: increasing the visibility, utility, and adoption of existing quantitative biology materials and the capacity for peer educator interaction;
- *QUBES Metrics*: quantifying and tracking faculty contribution to quantitative biology education scholarship; and,
- *Implementation Research*: studying and disseminating the features of QUBES that increase implementation success.

Mayes will introduce the QUBES Consortium website and resources <https://qubeshub.org/>, including position papers developed by the group on the role of modeling in undergraduate biology. He will explore definitions and examples of Quantitative Reasoning (QR) in undergraduate biology, including discussion of the Quantitative Act (QA), Quantitative Interpretation (QI), and Quantitative Modeling (QM). This includes teaching strategies for implementing QR into undergraduate biology, as well as the efforts to assess the impact of integration of QR into biology on student attitudes and learning. Authentic teaching will be modeled in the workshop, so come ready to work on integrating QR into your class!

Friday, February 9, 2018

Agnes Arnold Hall 15, 11:30 – 12:30 pm

Lunch will be provided. Please RSVP by Feb 6 using the link below:

www.SignUpGenius.com/go/10C0D4FADAF28A5FB6-including