

Overview

I have actively served at all levels of ERAU-W as well as in my professional community. In just my first two years at ERAU-W, I participated in the College of Arts & Science's Faculty Council as well as chaired the ERAU-W Faculty Senate Academic Technology committee. After the sudden passing of Dr. Karen Keene in February 2023, I stepped up to serve as Associate Chair of the department of Mathematics, Science, and Technology in addition to the various service I perform for my department. Outside of Embry-Riddle, I am involved in the Mathematical Association of America (MAA) and the Special Interest Group on Research in Undergraduate Mathematics Education (RUME). The MAA is the largest national association of American and Canadian mathematicians with a membership of over 24,000. RUME was the first Special Interest Group of the MAA and is the largest national association of collegiate mathematics education researchers in the United States. I serve on the MAA Council on Teaching and Learning as well as the chair for the Subcommittee on Technology in Mathematics Education. These groups allow for interaction and influence of college educators, especially with relation to technology. I also serve small committees in RUME as a stepping stone toward running for a leadership role within the research community. Outside of ERAU and my professional communities, I serve as a frequent journal reviewer and grant reviewer for the National Science Foundation. For journals, I am commonly called on to review papers on APOS Theory, a theoretical framework I have published on, as well as student learning through technology. For grants, I commonly review for the NSF Improving Undergraduate STEM Education (IUSE) initiative.

I have itemized my service by category and provided a brief explanation for each below.

University

- **Educational Experiences Member** for the ERAU-W Quality Enhancement Plan committee, 2023–present.

Evaluated the Program Writing Assessments and Writing Instruction Plans submitted by ERAU-W, ERAU-DB, and ERAU-PS.

- **Grant Reviewer** for ERAU Faculty Innovative Research in Science and Technology (FIRST) grant and ERAU-W Faculty SEED grant, 2022–present.

Read and provided feedback on 4 grants submitted by ERAU-W faculty.

- **Academic Technology Committee Chair** for ERAU-W Faculty Senate, 2022–present.

Participated in the systematic review of various end-of-course evaluation vendors.

College

- **Appeal Committee Member** for ERAU College of Arts and Sciences, 2023–present.

Negotiated grade appeal process for appeals that arose from instructors in the department of Mathematics, Science, and Technology.

- **Faculty Council Member** for ERAU-W College of Arts and Sciences, 2022-2023. Note: Term ended after one year due to accepting role as department of Mathematics, Science, and Technology Associate Chair.

Discussed issues brought up by faculty, co-led efforts to establish an ERAU-W COAS Faculty Council award, and provided COAS leadership feedback on proposals.

Department

- **Associate Chair** for department of Mathematics, Science, and Technology, 2023–present.

Program chair for Computer Science, Data Science, Astronomy, and Chemistry courses. Instituted various programming scripts to improve admin efficiencies such as listing instructors by course for a term, organizing instructor end-of-course evaluations by course, and standardizing faculty activity reporting.

- **Minor Coordinator** of Applied Mathematics (2022–present) and Applied Data Science (2023).

Attended COAS program meetings, advertised for minors, and answered any minor questions such as course equivalencies. Led development of Applied Data Science minor and one of its required courses (CSCI 251).

- **Course Mentor** for CSCI 251 (2023–present), MATH 111 (2022–present), STAT 412 (2022–present), GNED 103 (2021–2022), and MATH 106 (2021–2022).

Contacted instructors at beginning of term, provided all course updates, answered any adjunct issues with courses. Course Developer for CSCI 251 and MATH 111.

- **Hiring Committee Member** for tenure-track candidate in Data Science for Department of Mathematics, Science, & Technology.

Read application packets, met with all 1st and 2nd waves of candidates, and provided evaluation for final recommendation to dean.

Academe

- **MAA Council Member** for Mathematical Association of America Council on Teaching and Learning, 2022–present.

Provide updates and guidance for national society Mathematical Association of America. Represent interests on technology in undergraduate mathematics education.

- **MAA committee member** for Mathematical Association of America Committee for Teaching in Undergraduate Mathematics (CTUM), 2023–present.

Stimulate evidence-based effective and equitable teaching, learning, and assessment in undergraduate education in the mathematical sciences.

- **MAA Subcommittee Chair** for Mathematical Association of America Subcommittee on Technologies in Mathematics Education (STME), 2022–present. Member only 2021–2022.

Organized activities to update college-level math educators on most recent developments in technology for undergraduate mathematics education. Led bi-yearly meetings.

- **RUME Committee Member** for the Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) for leadership nominations (2022–present) and annual conference programming (2020–2022).

SIGMAA on RUME is the premier national research group on college-level mathematics education. The annual conference programming committee provides additional reviews on potential conference proceedings and reviews all conflicting proceedings reviews. The leadership nominations committee solicits and evaluates nominees for any open officer positions within the group. The committee then sends forward the final ballot of nominees to the RUME secretary for general voting.

- **NSF Grant Reviewer** panelist for National Science Foundation grant panels, 2022–present.

I have served on 2 panels. Serving on an NSF panel requires careful reading of approximately 9 grant proposals. For 2 of these proposals, you lead all discussion and provide a panel review for the proposal. For 5 of these proposals, you act as a secondary reader that provides critical review of the proposal. For the rest of the proposals, you act as a tertiary reader that provides overall review of the proposal.

- **Journal Reviewer** for Educational Studies in Mathematics (2022–present), Mathematical Thinking and Learning (2021–present), International Journal of Research in Mathematics Education (2020–present), Journal of Assessment in Higher Education (2019–present), Journal of Mathematical Behavior (2017–present), and Problems, Resources, and Issues in Mathematics Undergraduate Studies (2017–present).

Completed approximately 4 reviews per academic year. In particular, an editor from Educational Studies in Mathematics has reached out to me specifically for my expertise in APOS Theory, a mathematics education theoretical framework.