

# SCIENCE EDUCATION, PHD

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## Contacts

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## Faculty

Sharon Dotger, Heather Lavender

Students with an interest in research and/or university teaching usually pursue the Ph.D. degree. Their programs emphasize intensive study in a major area of specialization and often a minor area as well, leading to the development or extension of theory and research in the major field. The Ph.D. program in Science Education offers two primary options.

Graduates of the Ph.D. program in Science Education with an emphasis on teaching and teacher education for the K-12 level pursue a wide range of career paths. Many doctoral graduates assume faculty positions in elementary, middle or secondary education and/or teacher education at major research universities, as well as teacher preparation colleges. This degree prepares individuals to conduct science education research, teach science pedagogy and curriculum courses, and to create professional development programs for K-12 education. Some graduates also pursue careers as school district administrators.

## Additional Information

Doctoral study with an emphasis in applied exercise physiology is also offered in conjunction with the School of Education's Ph.D. program in science education. This highly individualized doctoral degree in Science Education with a concentration in exercise physiology is a research intensive program offered through the Science Education Department. In addition to course work, students work with their faculty mentor on various research projects. Students are encouraged to contact their potential faculty mentor directly prior to applying.

## Student Learning Outcomes

1. Explore foundational knowledge of science education history, theories, research, and instructional practice
2. Synthesize understanding of a topically-focused body of science education literature
3. Demonstrate expertise as a science teacher educator, including undergraduate or graduate teaching, field supervision, advising, and mentoring
4. Conduct publishable original science education research