STO 401 Communicating Science
2 Credits
Offered Spring Even-numbered Years
This highly interactive course allows students to gain hands-on experience designing and practicing science communication for public audiences. Over the course of the semester, students will design three science communication efforts and present their own science to peers. Students will also explore relevant communication theories and current topics.
Prerequisites: Junior or Senior standing.
Stacked with STO 601.
Lecture + Lab + Other: 2 + 0 + 0

STO 601 Communicating Science
2 Credits
Offered Spring Even-numbered Years
This highly interactive course allows students to gain hands-on experience designing and practicing science communication for public audiences. Over the course of the semester, students will design three science communication efforts and present their own science to peers. Students will also explore relevant communication theories and current topics.
Prerequisites: Graduate standing.
Stacked with STO 401.
Lecture + Lab + Other: 2 + 0 + 0

STO 602 Mentoring in the Sciences
2 Credits
Offered Fall Even-numbered Years
Effective mentoring can be learned, but not taught. Good mentors are normally produced through years of practice, successes and failures, and no two mentoring situations are alike. This course provides a forum for graduate students to develop their mentoring philosophy and build effective mentoring skills.
Prerequisites: Graduate Standing.
Lecture + Lab + Other: 2 + 0 + 0

STO 603 Instructional Design
1 Credit
Offered Spring Odd-numbered Years
This graduate seminar course will address important components of course planning and instructional design that reflect best practices in science teaching. This course focuses on the overall design of courses, the integration of the various components of a course, the development and implementation of objectives, assessments and syllabus construction.
Prerequisites: Graduate standing.
Lecture + Lab + Other: 1 + 0 + 0

STO 604 Science Teaching and Outreach Internship
4 Credits
Offered As Demand Warrants
Under the supervision of a faculty member, students gain professional experience in science teaching or outreach by choosing one of the following strands: 1) higher education, 2) formal K-12 education, or 3) informal education. An internship plan is developed prior to enrollment and agreed upon by the instructor of record, faculty mentor or K-12 teacher mentor, and student.
Prerequisites: STO 666 for higher education strand or STO 601 for formal K-12 education or informal education strand.
Lecture + Lab + Other: 0 + 0 + 12

STO 666 Scientific Teaching
2 Credits
Offered Fall Odd-numbered Years
This course explores methods for teaching science at the university level. We emphasize methods of course design, instructional techniques, assessment and course management that have been shown by research to improve student learning. This course is intended for graduate students in the sciences who have an interest in teaching methods.
Prerequisites: Graduate standing.
Lecture + Lab + Other: 2 + 0 + 0

STO 692 Current Topics in Scientific Teaching
1 Credit
Offered Alternate Fall
This graduate seminar course explores current trends in science education at the pre-college and college levels. Topics may include diversity, technology, active learning, and others. The course will rely on readings from primary literature and discussion.
Prerequisites: Graduate standing.
Recommended: STO 666 or STO 601.
Lecture + Lab + Other: 1 + 0 + 0

STO 692P Current Topics in Scientific Teaching
1 Credit
Offered Alternate Fall
This graduate seminar course explores current trends in science education at the pre-college and college levels. Topics may include diversity, technology, active learning, and others. The course will rely on readings from primary literature and discussion.
Prerequisites: Graduate standing.
Recommended: STO 666 or STO 601.
Lecture + Lab + Other: 1 + 0 + 0