

Science and Mathematics Education (SCMATHE)

Courses

SCMATHE 210 Practicum in Science and Math Education Research and Development 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Practical experience on an educational research or development project on campus or elsewhere for 8-12 hours per week. Class meetings augment research experience with discussions of readings and interaction with guest speakers.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of fieldwork per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Letter grade.

SCMATHE 220C Instructional Design in Science and Mathematics Education 3 Units

Terms offered: Spring 2025, Spring 2023, Spring 2021

Survey of literature on design of instruction in science and mathematics, including development of computer-based instruction. Includes consideration of evaluation methods and development of instruction modules for topics in science and mathematics.

Rules & Requirements

Prerequisites: 220B or consent of the instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Letter grade.

SCMATHE 292 Research Seminar and Colloquium 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024

Discussion of current education research carried on by students, faculty, and guest speakers. A written analysis of several presentations required.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of colloquium per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

SCMATHE 294 Formulation of Educational Research 1 - 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Development of thesis proposal under supervision of faculty member.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Letter grade.

SCMATHE 295 Research 1 - 12 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Independent research activities under supervision of a faculty member.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Letter grade.

SCMATHE 299 Individual Reading and Study 1 - 5 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Individual reading and study under the supervision of a faculty member.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate

Grading: Letter grade.

SCMATHE 602 Individual Study for Qualifying Examination 1 - 8 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Individual study, under the supervision of a faculty member, designed to prepare the student for Ph.D qualifying examination.

Rules & Requirements

Prerequisites: Consent of instructor

Credit Restrictions: Course does not satisfy unit or residence requirements.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Science and Mathematics Education/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.