Science and Mathematics Education (SCMATHE)

SCMATHE 210 Practicum in Science and Math Education Research and Development 1 - 4 Units
Department: Science and Mathematics Education
Course level: Graduate
Terms course may be offered: Fall and spring
Grading: Letter grade.
Hours and format: 2 hours of meeting per week.
Prerequisites: Consent of instructor.
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.
One unit of credit for each four hours of student effort per week. Course may be repeated for credit. Course may be repeated for credit when topic changes.

SCMATHE 220C Instructional Design in Science and Mathematics Education 3 Units
Department: Science and Mathematics Education
Course level: Graduate
Term course may be offered: Spring
Grading: Letter grade.
Hours and format: 3 hours of lecture/discussion per week.
Prerequisites: 220B or consent of the instructor.
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.

SCMATHE 292 Research Seminar and Colloquium 1 Unit
Department: Science and Mathematics Education
Course level: Graduate
Terms course may be offered: Fall and spring
Grading: Offered for satisfactory/unsatisfactory grade only.
Hours and format: 2 hours of lecture/discussion per week.
Prerequisites: Consent of instructor.
Discussion of current education research carried on by students, faculty, and guest speakers. A written analysis of several presentations required.
Course may be repeated for credit. Course may be repeated for credit when topic changes.

SCMATHE 294 Formulation of Educational Research 1 - 3 Units
Department: Science and Mathematics Education
Course level: Graduate
Terms course may be offered: Fall and spring
Grading: Letter grade.
Hours and format: Individual conferences with instructor.
Prerequisites: Consent of instructor.
Development of thesis proposal under supervision of faculty member.
One unit of credit for each four hours of student effort per week. Course may be repeated for credit. Course may be repeated for credit when topic changes.

SCMATHE 295 Research 1 - 12 Units
Department: Science and Mathematics Education
Course level: Graduate
Terms course may be offered: Fall and spring
Grading: Letter grade.
Hours and format: Individual conferences.
Prerequisites: Consent of instructor.
Independent research activities under supervision of a faculty member.
One unit of credit for each four hours of student effort per week. Course may be repeated for credit. Course may be repeated for credit when topic changes.

SCMATHE 299 Individual Reading and Study 1 - 5 Units
Department: Science and Mathematics Education
Course level: Graduate
Terms course may be offered: Fall and spring
Grading: Letter grade.
Hours and format: Individual conferences.
Prerequisites: Consent of instructor.
Individual reading and study under the supervision of a faculty member.
One unit of credit for each four hours of student effort per week. Course may be repeated for credit. Course may be repeated for credit when topic changes.

SCMATHE 602 Individual Study for Qualifying Examination 1 - 8 Units
Department: Science and Mathematics Education
Course level: Graduate examination preparation
Terms course may be offered: Fall and spring
Grading: Offered for satisfactory/unsatisfactory grade only.
Hours and format: Individual conferences.
Prerequisites: Consent of instructor.
Individual study, under the supervision of a faculty member, designed to prepare the student for Ph.D qualifying examination.
Course may be repeated for credit. Course may be repeated for credit when topic changes. Course does not satisfy unit or residence requirements.