SOc 278. Punishment and Correction: Evaluating Theories and Policies (4) Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Takes a critical and evaluative approach to the punishment and correctional systems, assessing what "works and doesn't work" in efforts to reduce crime and delinquency. Examines prisons, probation, and other crime control measures from a perspective emphasizing the need for systematic evaluation research. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.

SOC 279. Analysis of the Criminal Justice Process (4) Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): either graduate standing and SOC 249 or consent of instructor. This course examines in depth the penal social control agencies of the police, the courts, and the correctional system both from ideological and operational points of view. The effects on the individual and society of these mechanisms as well as alternative approaches to formal control mechanisms are examined. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and advisor.

SOC 280 (E-Z). Topics in Criminology and Sociological Studies (4) Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Advanced seminars in criminology and sociological studies: A. Patterns of Criminal and Deviant Behavior; B. Ecological Perspectives on Crime and Delinquency; C. Biological and Psychobiological Studies of Crime and Delinquency; D. Conflict and Radical Approaches in Criminology and Sociological Studies; E. Sociological Theories of Law; F. Law, Power, and Social Conflict; G. Political Criminality. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.

SOC 281. Political Economy and Global Social Change (4) Lecture, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Focuses on classical and contemporary political economy, social movements, and the historical development of social systems. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.

SOC 282. International Migration (4) Seminar, 4 hours. Prerequisite(s): SOC 201A, SOC 203A. A hands-on research course in the concepts, theories, and techniques used in the analysis of international migration. Covers the nature and origins of and patterns and trends in global migration from colonial times to the twenty-first century. Provides an overview of migration theories, migration policies, and current research on immigration. Course is repeatable.

SOC 284. Sociology of the Family (4) Seminar, 3 hours; extra reading, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Covers major theoretical frameworks and empirical research on the sociology of the family. Reviews research on courtship, marriage, parenthood, divorce, child socialization, and intergenerational family relations from a comparative perspective. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.

SOC 285 (E-Z). Topics in Family and Social Psychology (4) Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Advanced study in family and social psychology. E. Theory in Social Psychology, G. The Interaction Process, I. Sociolinguistics, J. Social Psychology of Emotions; K. Small Groups; M. Social Psychology of the Family; N. Social Psychology of Gender; S. Self and Identity. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.

SOC 290. Directed Studies (1-6) scheduled research, 3-15 hours; consultation, 1 hour. Prerequisite(s): graduate standing and consent of instructor. This course is designed to provide students with reading and research work under the tutorial supervision of a faculty member in support of developing their knowledge of specialty areas and/or preparing original research work. With consent of the graduate advisor, this course may be taken for a letter grade to satisfy required seminars in the period of specialization if regular seminars are not available. Otherwise course will be graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SOC 291. Individual Study in Coordinated Areas (1-12) Individual study, 3-36 hours. Prerequisite(s): graduate standing. A program of study designed to advise and assist candidates who are preparing for doctoral examinations. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SOC 293. Research Topics in Sociology (2) Lecture, 2 hours. Prerequisite(s): graduate standing in Sociology. A series of lectures by guests, staff, and advanced graduate students on research topics in Sociology. Graded Satisfactory (S) or No Credit (NC). May be repeated for credit.

SOC 297. Directed Research (1-6) Graded Satisfactory (S) or No Credit (NC).

SOC 299. Research for Thesis or Dissertation (1-12) Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

Professional Courses

SOC 301. Directed Studies in the Teaching of Sociology (2) Consultation, 1 hour; practicum, 3 hours. Prerequisite(s): consent of instructor; prior or concurrent enrollment in the Teaching Assistant Development Program offered by the Graduate Division. Discussion and evaluation of pedagogical techniques and materials used in teaching sociology at the college level. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SOC 302. Teaching Practicum (2-4) Consultation, 1 hour; practicum, 3-9 hours. Prerequisite(s): teaching assistant status in the Sociology Department or consent of instructor. Supervised teaching in a college-level class. Deals with the problems and techniques of teaching, including handling discussions, preparation and grading of examinations and written work, and student-instructor relations. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SOC 401. Grant Writing in the Social Sciences (4) Lecture, 3 hours; individual study, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Presents an overview of successful grant writing. Topics include proposal planning, the grant writing process, logic and research model development, integrating proposal elements, and what to do if a grant is rejected. Participants actively develop a research proposal and review potential funding sources. Graded Satisfactory (S) or No Credit (NC).

Soil and Water Sciences

Subject abbreviation: SWSC
College of Natural and Agricultural Sciences

Jiaying “Jay” Gan, Chair
Robert C. Graham, Ph.D., Graduate Advisor
Program Office, 3428 Pierce
(951) 827-5103; mari.ridgeway@ucr.edu
soilwater.ucr.edu

Professors
Christopher Arnheim, Ph.D. Soil Chemistry (Environmental Sciences)
David E. Crowley, Ph.D. Soil Microbiology (Environmental Sciences)
William T. Frankenberger, Jr., Ph.D. Soil Microbiology (Environmental Sciences)
Jiaying “Jay” Gan, Ph.D. Environmental Chemistry (Environmental Sciences)
Robert C. Graham, Ph.D. Soil Mineralogy and Pedology (Environmental Sciences)
Daniel Schlenk, Ph.D. Aquatic Ecotoxicology (Environmental Sciences)
Jiri Simonek, Ph.D. Hydrology (Environmental Sciences)
Leosheng Wu, Ph.D. Soil Physics (Environmental Sciences)
Marylyn V. Yates, Ph.D. Environmental Microbiology (Environmental Sciences)
Paul J. Ziemann, Ph.D. Atmospheric Chemistry (Environmental Sciences)

Professors Emeriti
Andrew C.-S. Chang, Ph.D. Agricultural Engineering (Environmental Sciences)
Walter J. Farmer, Ph.D. Soil Chemistry (Environmental Sciences)
William A. Jury, Ph.D. Soil Physics (Environmental Sciences)
John Letey, Jr., Ph.D. Soil Physics (Environmental Sciences)
Lanny J. Lund, Ph.D. Soil Morphology, Genesis, and Classification (Environmental Sciences)
Albert L. Page, Ph.D. Soil Chemistry (Environmental Sciences)

Associate Professors
Michael A. Anderson, Ph.D. Environmental Chemistry (Environmental Sciences)
David M. Crohn, Ph.D. Biosystems Engineering (Environmental Sciences)

Adjunct Assistant Professors
Brian Lanoil, Ph.D. Environmental Microbiology (Environmental Sciences)
Lisa Stein, Ph.D. Environmental Microbiology (Environmental Sciences)

Cooperating Faculty
Michael F. Allen, Ph.D. (Biological Plant Pathology)
Mark R. Matsumoto, Ph.D. (Chemical and Environmental Engineering)

Harry W.K. Tom, Ph.D. (Physics and Astronomy)

The graduate program in Soil and Water Sciences is not currently accepting new students. Students interested in graduate study in soil or water sciences can be accommodated in other graduate programs and are encouraged to contact the Environmental Sciences Student Affairs Offices at (951)827-5103 or (951)827-2441 for more information on how to apply.
Graduate Program
The graduate program in Soil and Water Sciences is administered by the Department of Environmental Sciences and offers both M.S. and Ph.D. degrees.

Admission The university requires GRE General Test scores (verbal, quantitative, analytical). As well as fulfilling the university requirements for admission to the Graduate Division, students must satisfy certain program requirements. Admission to the program requires a baccalaureate degree with preparation in both physical and life sciences. Students should have completed one year of general chemistry, as well as courses in general physics, organic chemistry, calculus through integrals, general biology, statistics, and physical geology or physical geography. Students who have not taken these courses are directed by the admissions and review committee and their major advisor to the appropriate program to correct the deficiencies.

Course Work Students, in consultation with their advisory committee and other faculty as appropriate, develop a program of course work to satisfy the degree requirements and the career objective. A study list of required and elective courses must be completed by the end of the second quarter of study and submitted to the admissions and review committee.

Students must complete one course in each of the four broad categories of soil and water sciences: chemistry, physics, biology, and natural structure and diversity. Students may have completed these prior to admission or they may take them early in their graduate program. Courses at UCR that meet the requirement of each category are listed below.

Chemistry
- ENSC 104/SWSC 104 (Environmental Soil Chemistry)
- CHEM 135/ENSC 136/ENTX 136/SWSC 136 (Chemistry of Natural Waters)

Physics
- ENSC 107/SWSC 107 (Soil Physics)
- ENSC 163 (Hydrology)

Biology
- ENSC 133/MCBL 133/SWSC 133 (Environmental Microbiology)
- BPSC 134/ENSC 134/SWSC 134 (Soil Conditions and Plant Growth)
- ENSC 141/MCBL 141/SWSC 141 (Public Health Microbiology)

Natural Structure and Diversity
- ENSC 138/GEO 138/SWSC 138 (Soil Morphology and Classification)
- ENSC 140/SWSC 140 (Linnology)

For a complete description of the program’s requirements, students are referred to the Guidelines for Graduate Students available in the Environmental Sciences Student Affairs Office. Other general university requirements for advanced degrees are given in the Graduate Studies section of this catalog.

Master’s Degree
The Department of Environmental Sciences offers the M.S. degree in Soil and Water Sciences. Only seminar courses, directed study, internship, thesis and dissertation hours may be taken on a Satisfactory (S)/No Credit (NC) basis.

Plan I (Thesis) Students must complete a minimum of 36 quarter units of graduate and upper-division undergraduate courses in, or significantly related to, soil and water sciences. At least 24 of the 36 units must be in graduate courses. A maximum of 12 of these units may be in graduate research for the thesis. No more than 4 units of SWSC 290 and 2 units of SWSC 250 may be applied toward the degree. Students must pass a final oral examination.

Plan II (Comprehensive Examination) Students must complete a minimum of 36 quarter units of graduate and upper-division undergraduate courses in or significantly related to soil and water sciences. At least 18 units must be in graduate courses. Students may count no more than 2 units of SWSC 250 and 6 units of SWSC 298-I toward the required 18 units and no units from graduate research for thesis or dissertation (SWSC 297 or SWSC 299). Students take a comprehensive written examination that covers fundamental topics in soil and water sciences. The written exam, which is three to four hours long, is prepared and evaluated by a committee appointed by the department chair. The exam is taken during the latter part of the final quarter in the M.S. program. Students must wait at least eight weeks before retaking a failed examination. Students failing the examination twice are dismissed from the program.

Doctoral Degree
The Department of Environmental Sciences offers the Ph.D. in Soil and Water Sciences. The Ph.D. program provides specialized, research-based training in a variety of soil and water sciences fields. In addition to the four core courses enumerated above, the minimum requirements for the Ph.D. degree include the following:

1. Complete all course work with an average GPA of 3.0 or greater
2. Pass both the written and oral qualifying examinations
3. Complete at least 4 units of Teaching Practicum (SWSC 302)
4. Submitting an approved research dissertation

Course Work Before advancement to candidacy, Students must complete all required course work as approved by their advisory committee with an average GPA of 3.0 or greater.

Written and Oral Qualifying Examinations Students must pass written qualifying examinations administered by a five-member committee and an oral examination administered by the same committee; the latter includes the defense of an original research proposal. The examining committee must include one member from outside the graduate program. After successfully completing these examinations and complying with university rules, students are advanced to candidacy.

Dissertation Students must submit a dissertation consisting of original research in the field of soil and water sciences. The dissertation must be accepted by a three-member dissertation committee. Students must then pass a final oral examination, which deals primarily with the dissertation and is conducted by the dissertation committee.

Normative Time to Degree 15 quarters

Upper-Division Courses

SWSC 100. Introduction to Soil Science (4) F Lecture, 3 hours; laboratory, 3 hours. Prerequisite(s): both CHEM 001C and CHEM 01LC or both CHEM 01HC and CHEM 1HLC; GEO 001 is recommended. Explores the fundamental principles of soil science and soils as a natural resource. An introduction to the morphology, physics, chemistry, microbiology, fertility, classification, development, and management of soils in relation to the environment. Cross-listed with ENSC 100. Credit is awarded for only one of ENSC 100/SWSC 100 or ENSC 100H/SWSC 100H. Amherst

SWSC 100H. Honors Introduction to Soil Science (4) F Lecture, 3 hours; laboratory, 3 hours. Prerequisite(s): admission to the University Honors Program or consent of instructor; both CHEM 001C and CHEM 01LC or both CHEM 01HC and CHEM 1HLC; GEO 001 is recommended. Honors course corresponding to ENSC 100. Explores the fundamental principles of soil science and soils as a natural resource. An introduction to the morphology, physics, chemistry, microbiology, fertility, classification, development, and management of soils in relation to the environment. Satisfactory (S) or No Credit (NC) grading is not available. Cross-listed with ENSC 100H. Credit is awarded for only one of ENSC 100/SWSC 100 or ENSC 100H/SWSC 100H. Amherst

SWSC 104. Environmental Soil Chemistry (4) F Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): CHEM 005 or ENSC 100/SWSC 100 or ENSC 100H/SWSC 100H or consent of instructor. Quantitative study of the chemistry of the solid, liquid, and gas phases in soils and sediments. Topics include solid and solution speciation, mineral solubility, ion exchange and adsorption reactions, oxidation-reduction, and the chemistry of organic contaminants and toxic trace elements in soils. Cross-listed with ENSC 104. Parker

SWSC 107. Soil Physics (4) S Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): MATH 009B or MATH 09H; PHYS 002A; or consent of instructor. Topics include physical properties of soils and methods of evaluation. Emphasis is on movement of water, heat, gases, and chemicals through soil. Cross-listed with ENSC 107. Wu
SWSC 120. Soil Ecology (3) S Lecture, 3 hours. Prerequisite(s): BIOL 002 or both BIOL 005A and BIOL 05LA; both CHEM 001C and CHEM 011C or both CHEM 01HC and CHEM 1HLC. Examination of soil biota and their relationships with plants and the soil environment. Emphasis is on soil biotic interactions that influence soil fertility, plant disease, and plant growth. Examines the importance of the different microbial and faunal groups from the rhizosphere to the ecosystem level. Cross-listed with ENSC 120 and NEM 120. Crowley, De Ley

SWSC 127. Fate and Transport of Contaminants in Soil (4) W Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): both CHEM 001C and CHEM 011C or both CHEM 01HC and CHEM 1HLC; ENSC 100/WSW 100 or ENSC 100H/WSW 100H; MATH 098B or MATH 099B. Topics include interactions of environmental conditions with abiotic and biotic transformation and transport of major organic and inorganic contaminants in soil. Cross-listed with ENSC 127. Gan

SWSC 133. Environmental Microbiology (4) Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): BIOL 005A, BIOL 05LB, BIOL 055C, or consent of instructor. Introduction to nonpathogenic microorganisms in the environment. Topics include an introduction to microbial biology and microbial and metabolic genetic diversity; methods; symbiotic interactions; biofilms; and geomicrobiology and biogeochemistry. Explores life in extreme environments and the effects of the physical and chemical environment on microbes. Cross-listed with ENSC 133 and MCBL 133.

SWSC 134. Soil Conditions and Plant Growth (4) W Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): BIOL 104/BSPC 104, ENSC 100/WSW 100 or ENSC 100H/WSW 100H; consent of instructor. Study of the chemical, physical, and biological properties of soils and their influence on plant growth and development. Topics include soil-plant water relations; fundamentals of plant mineral nutrition; soil nutrient pools and cycles; soil acidity, alkalinity, salinity, and sodicity; root symbioses and rhizosphere processes. Cross-listed with BSPC 134 and ENSC 134. Crowley

SWSC 136. Chemistry of Natural Waters (4) S Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): CHEM 005 with a grade of “C-” or better or ENSC 104/WSW 104 with a grade of “C-” or better or consent of instructor. Introduction to processes controlling the chemical composition of natural waters. Topics include chemical equilibria, redox and coordination chemistry, oxidation-reduction reactions, precipitation-dissolution, air-water exchange, and use of equilibrium and kinetic models for describing marine nutrient, trace metal, and sediment chemistry. Cross-listed with CHEM 136, ENSC 136, and ENTX 136. Ziemann

SWSC 138. Soil Morphology and Classification (4) S Lecture, 3 hours; laboratory, normally 3 hours; two 1-day field trips. Prerequisite(s): ENSC 100/WSW 100 or ENSC 100H/WSW 100H; GEO 001 or GEO 002; or consent of instructor. Study of the soils as they occur in the field and their relations to current and past environmental conditions. Use of field and laboratory data to understand soil genesis, causes of soil variability, fundamentals of soil classification, and land use potentials. Laboratory emphasizes the description and interpretation of soils and landscapes in the field. Cross-listed with ENSC 138 and GEO 138. Graham

SWSC 140. Limnology (4) S Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): both CHEM 001C and CHEM 011C or both CHEM 01HC and CHEM 1HLC; ENSC 101. Study of surface waters. Considers in detail the physical and chemical processes in surface waters, aquatic biology, ecosystem dynamics, and aspects of surface water quality and modeling. Cross-listed with ENSC 140. Anderson

SWSC 141. Public Health Microbiology (4) F Lecture, 4 hours. Prerequisite(s): BIOL 002 or both BIOL 005A and BIOL 05LA; BIOL 003 or BIOL 005B; upper-division standing; or consent of instructor. Introduction to transmission of human pathogenic microorganisms through environmental media, including drinking water, wastewater, and air. Topics include characterization of environmentally transmitted pathogens, microbial risk assessment, sampling and detection methods for microorganisms in environmental samples, waterborne disease outbreaks, recycling or reuse of wastewater, microbial regulations and standards, and indoor air microbiology. Cross-listed with ENSC 141 and MCBL 141. Yates

SWSC 190. Special Studies (1-5) F, W, S conference and discussion, variable time. Prerequisite(s): advanced standing. Directed group study in soil and water sciences for advanced undergraduates. Course is repeatable.

SWSC 197. Research for Undergraduates (1-4) F,W,S discussion, 1 hour; laboratory, 9 hours. Prerequisite(s): both CHEM 001C and CHEM 011C or both CHEM 01HC and CHEM 1HLC; GEO 001. ENSC 104/WSW 104 and ENSC 138/GEOS 138 are recommended. Covers the composition, structure, and classification of minerals commonly found in soils. Focuses on the origin, occurrence, and properties of soil minerals in relation to chemical, pedologic, and geomorphic conditions. Includes theory of mineral identification techniques, including X-ray diffraction, thermal and infrared analysis, and electron microscopy. Graham

SWSC 213. Soil Mineralogy Laboratory (4) W, Even Years Discussion, 1 hour; laboratory, 9 hours. Prerequisite(s): concurrent enrollment in SWSC 213. Training in methods of soil mineralogical analysis, including sample preparation, X-ray diffraction, electron microscopy, thermal analysis, infrared spectroscopy, and surface area analysis. Data interpretation and presentation. Graham

SWSC 214. Soil and Water Chemistry Laboratory (2) Laboratory, 6 hours. Prerequisite(s): concurrent enrollment in ENSC 104/WSW 104 or consent of instructor. A series of advanced laboratory exercises involving modern analytical methods for soils, sediments, and surface waters. Topics include trace metal speciation, isotope exchange kinetics, mineral solubility, adsorption isotherms, redox couples, and partitioning and biodegradation of organic contaminants. Cross-listed with ENSC 214. Parker

SWSC 217. Vadose Zone Processes (4) W, Even Years Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): MATH 098B or MATH 099B, ENSC 107/WSW 107; or consent of instructor. Analysis of vadose zone processes using modern analytical methods for soils, sediments, and surface waters. Topics include trace metal speciation, isotope exchange kinetics, mineral solubility, adsorption isotherms, redox couples, and partitioning and biodegradation of organic contaminants. Cross-listed with ENSC 217. Simunek

SWSC 226. Soil Geomorphology (4) F, Odd Years Lecture, 2 hours; laboratory, 6 hours; two Saturday field trips per quarter. Prerequisite(s): ENSC 138/GEOS 138/WSW/138, GEO 162, or equivalents. Examines the interaction of pedogenic and geomorphic processes during the Quaternary, with an emphasis on the rate of these processes. Group research includes field data collection and analysis. May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor. Cross-listed with GEO 226. Graham, Kendrick

SWSC 232. Biogeochemistry (4) W, Odd Years Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): graduate standing; consent of instructor. A study of the biogeochemical cycling and exchange of carbon and important nutrients (N, S, base cations) between the lithosphere, hydrosphere, and atmosphere. Quantitatively describes processes at scales ranging from local to global. Addresses modern concerns about water and atmospheric quality, including global climate change. Cross-listed with SWSC 232. Parker

SWSC 245. Chemistry and Physics of Aerosols (3) F, Odd Years Lecture, 3 hours. Prerequisite(s): CHEM 109, CHEM 110B; or consent of instructor. Fundamentals of chemical and physical processes controlling behavior and properties of airborne particles. Topics include particle mechanics; electrical, optical, and thermodynamic properties; nucleation; surface and aqueous-phase chemistry; gas-particle
partitioning; sampling; size and chemical analysis; atmospheric aerosols; and environmental effects. Cross-listed with CHEM 245 and ENTX 245. Ziemann

SWSC 250. Seminar in Soil and Water Sciences (1-2) F, W, S Seminar, 1 hour. Formal seminars on selected topics in the field of soil and water sciences by graduate students, staff, and invited scholars. Two units of credit for students who present seminars and one unit of credit for students enrolled. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SWSC 262. Wetlands Biogeochemistry Seminar (2) Seminar, 2 hours. Prerequisite(s): CHEM 136/ENSC 136/ENTX 136 or SWSC 136 or ENSC 104/SWSC 104; ENSC 141/MCBL 141/SWSC 141; or consent of instructor. Involves oral reports and discussion by students, faculty, and visiting scholars on current research topics in biogeochemical cycling in wetland environments. Emphasis is on environmental quality issues, use of constructed wetlands as recipients of various wastewaters, and the role of wetlands in global nutrient cycles and thus climatic change. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

SWSC 290. Directed Studies (1-6) Individual study, 3-18 hours. Prerequisite(s): graduate standing and consent of instructor. Individual studies on specially selected topics in soil and water sciences under the direction of a staff member. No more than four units may be applied toward the unit requirements for the Master’s degree. Graded Satisfactory (S) or No Credit (NC). Course is repeatable to a maximum of 8 units.

SWSC 297. Directed Research (1-6) conference and research, variable time. Graded Satisfactory (S) or No Credit (NC).

SWSC 298-I. Individual Internship (1-12) Internship, 3-36 hours. Prerequisite(s): graduate standing in Soil and Water Sciences. Individual study or apprenticeship with an appropriate professional individual or organization and an academic advisor to gain professional experience and knowledge on a topic related to soil or water quality. Graded Satisfactory (S) or No Credit (NC). Course is repeatable but only 6 units may be used toward the 36 units required for the M.S. degree.

SWSC 299. Research for Thesis or Dissertation (1-12) conference and research, variable time. Prerequisite(s): consent of a staff member. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

Professional Course

SWSC 302. Teaching Practicum (1-4) F, W, S Practicum, 4-12 hours. Prerequisite(s): graduate standing. Supervised teaching in Soil and Water Sciences or Environmental Sciences courses. Required for all teaching assistants in Soil and Water Sciences. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

Southeast Asian Studies Graduate Program

Subject abbreviation: SEAS

College of Humanities, Arts, and Social Sciences

Hendrik M.J. Maier, Ph.D., Director
Program Office, 2402 Humanities and Social Sciences
(951) 827-5007; seatrip.ucr.edu

Committee in Charge
Mariam Beevi Lam, Ph.D. (Comparative Literature and Foreign Languages)
René T.A. Lysloff, Ph.D. (Music)
Sally A. Ness, Ph.D. (Anthropology)
Deborah A. Wong, Ph.D. (Music)

Graduate Program

The Master’s Program in Southeast Asian Studies is an interdepartmental program centered on the study of the arts and cultures of Southeast Asia and its diasporas. To understand Southeast Asia as a region, students need to make sense of and engage with its diverse expressive forms of culture (including visual arts, literature, and performance) which are crucial in building and maintaining individual as well as group identity both within and across national or ethnic boundaries.

This program is designed for students with a strong interest in Southeast Asia, including those already admitted or enrolled in another graduate program. Students can be concurrently enrolled in both the Southeast Asian Studies M.A. program and another graduate degree program.

Admission All applicants must fulfill the standard admission requirements as established by the Graduate Division. Additionally, applicants must submit a Statement of Purpose to indicate a serious interest in Southeast Asian Studies (or a specific country or area in this region) as well as a writing sample (such as a past term paper or course essay) to demonstrate basic skills of scholarship.

Foreign Language Students must acquire (or increase) a distinct level of proficiency in at least one language relevant to Southeast Asian Studies prior to beginning research for the thesis and no later than the fifth quarter in the program. The required proficiency can be demonstrated by way of an exam or by completing one year of course work with a “B” or better.

International students from Southeast Asia may use their native language to fulfill this requirement.

Course Work All students are required to pass the Proseminar in Southeast Asian Studies (SEAS 200) with a “B” or better. Additionally, students must pass (with a “B” or better) four of the following six seminar courses:

- SEAS 201 Southeast Asian performance
- SEAS 202 Southeast Asian religions
- SEAS 203 Southeast Asian cultures
- SEAS 204 History of Southeast Asia
- SEAS 205 Literatures of Southeast Asia
- SEAS 206 Media in Southeast Asia

In addition, students can select four other graduate seminars or approved upper division undergraduate courses in accordance with their main field of interest and after approval by the Graduate Advisor and the student’s Thesis Committee. A total of 48 units of coursework, including thesis, are required for the degree in Southeast Asian Studies.

Students concurrently enrolled in another graduate program may, when appropriate, include units earned in that program toward the 48 units of the M.A. in Southeast Asian Studies. However, there must be at least 36 units uniquely applied to the Southeast Asian Studies degree.

Plan I (Thesis) Students enrolled in the Southeast Asian Studies Graduate Program (for the terminal M.A.) must submit an essay (thesis) of 30-40 pages reflecting original research, written under the supervision of a member of the program who also functions as the chair of their Thesis Committee. At the beginning of the second year students should write a research proposal outlining their research project. Approximately ten pages in length this proposal should describe the aims of the research and provide a broader theoretical framework. After this is approved students begin to conduct individual research in the field or in the library. Students must enroll in a minimum of 8 units of thesis study under the supervision of a Southeast Asian Studies faculty. Before filing the thesis with the Graduate Division students must pass a formal oral examination.

Plan II (Comprehensive Exam) Students concurrently enrolled in another degree program requiring an M.A. thesis (with the approval of the Southeast Asian Studies faculty) be awarded the M.A. degree by passing a comprehensive examination.

University Requirements

All master’s students must be enrolled for at least three quarters to fulfill the University residency requirement and must hold at least a 3.00 GPA in all upper division and graduate level course work related to the degree. A minimum of 48 units must be completed of which 36 must be graduate level (200 level) or approved upper division undergraduate (100 level) and apply only to the M.A. in Southeast Asian Studies.

Normative Time to Degree Two years