FORESTRY & ENVIRONMENTAL STUDIES

Kroon Hall, 203.432.5100
http://environment.yale.edu
M.S., M.Phil., Ph.D.

Dean
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Associate Professors
Craig Brodersen, Marian Chertow, Liza Comita, Justin Farrell, Eli Fenichel, Kenneth Gillingham

Assistant Professor
Narasimha Rao

FIELDS OF STUDY
Fields include agroforestry; biodiversity conservation; biostatistics and biometry; community ecology; ecosystems ecology; ecosystems management; energy and the environment; environmental and resource policy; environmental anthropology; environmental biophysics and meteorology; environmental chemistry; environmental ethics; environmental governance; environmental health risk assessment; environmental history; environmental law and politics; environmental management and social ecology in developing countries; forest ecology; green chemistry and engineering; hydrology; industrial ecology; industrial environmental management; plant physiology and anatomy; pollution management; population ecology; resource economics; silviculture; social ecology; stand development, tropical ecology, and conservation; sustainable development; urban ecology; urban geography; urban land cover change; urban planning; and water resource management.

SPECIAL ADMISSIONS REQUIREMENTS
Applicants should hold a bachelor's or master's degree in a field related to natural resources, such as forestry, or in a relevant discipline of the natural or social sciences, such as biology, chemistry, economics, or mathematics. The GRE General Test is required, but Subject Tests are optional.

SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE
Students are required to take F&ES 900, Doctoral Student Seminar and Responsible Conduct of Research, in the first year of their program. Aside from this requirement, there is no required curriculum of credit courses and no formal language requirement. Courses of study are individually designated through consultation between degree candidates and their advisers and dissertation committees. The amount of course work required will depend on the previous training of the student, but the normal requirement for a student with no previous graduate training is three or four courses per term for four terms. The program of each student will be evaluated at the end of the first year of residence. At least two term grades of Honors are required in the first two years of study; however, it is anticipated that grades of Honors or High Pass will be achieved in two-thirds of all courses taken. A written and oral qualifying examination is required upon completion of the course requirements. Students are expected to take the examination by the end of their second year, although this can be extended to the third year in cases with appropriate extenuating circumstances. At the time of the qualifying examination, the student must present a prospectus of the research work proposed for the dissertation. Successful completion of the qualifying examination and submission of the prospectus will result in admission to candidacy. Upon completion of the dissertation, the candidate must make unbound copies of the dissertation available to the faculty and appear for an oral examination at a time and place designated by the director of doctoral studies. Copies of the approved dissertation must be submitted to the Graduate School. Depending upon the nature of the dissertation topic, completion of the Ph.D. degree normally requires four years.

Teaching and research experiences are regarded as integral parts of the graduate training program in Forestry & Environmental Studies. All students are required to serve as teaching fellows (10 hours per week) for four terms. The nature of the teaching assignment is determined in cooperation with the student’s major adviser and the director of doctoral studies. With the permission of the director of doctoral studies, the total teaching requirement may be reduced for students who are awarded fellowships supported by outside funding. Regardless of outside funding, all doctoral students must serve as teaching fellows for a minimum of two terms.

COMBINED PH.D. PROGRAM
Forestry & Environmental Studies offers a combined doctoral degree with the Department of Anthropology. The purpose of the degree is threefold: it combines (1) the disciplinary identity and strengths of the Anthropology department with the interdisciplinary character and possibilities of F&ES, especially in bridging the social and natural sciences; (2) the strengths in ecological and environmental studies of F&ES with the social science strengths of the Anthropology department; and (3) the Anthropology department’s strengths in theory with the emphasis within F&ES on linking theory with policy and practice. The combined degree offers its graduates great flexibility...
when entering the marketplace. They can represent themselves as anthropologists and/or environmental scientists, as theoreticians and/or practitioners. Combined-degree recipients have the credentials to apply for policy-oriented positions with international institutions, as well as academic positions. The academic program of each student in the combined-degree program is tailored specifically to that student’s particular history, interests, and needs, but all combined-degree students are expected to follow the program’s general guidelines.

Prospective combined-degree students must initially apply either to Anthropology or to F&ES but not to both at the same time. However, applicants should indicate their interest in the combined degree by marking the application form appropriately. Once the student is accepted in the initial doctoral program, the application file will be considered in the second program, and a decision on the combined-degree application will be communicated by the Graduate School by the usual deadline for acceptance of admission offers. Such students will be allocated to their initial program as their primary administrative home, but will enter Yale as members of the combined-degree program. Being turned down for entry into the combined-degree program initially does not preclude reapplication after arriving at Yale the following fall term. More detailed guidelines for the combined-degree program can be found on the F&ES website at http://environment.yale.edu/doctoral/degrees/combined-anthropology.

**MASTER’S DEGREES**

**M.Phil.** Students may petition for this degree after they have passed the qualifying exam and advanced to candidacy. Applications for this master’s degree are not accepted.

**M.S. (en route to the Ph.D.)** This degree is normally granted only to students who are withdrawing from the Ph.D. program. Applications for this master’s degree are not accepted. Requirements that must be met for award of the M.S. are (1) successful completion of two years of course work in residence with two grades of Honors; (2) a written prospectus; (3) fulfillment of one term of the teaching requirement. Students who are eligible for or who have already received the M.Phil. will not be awarded the M.S.

For information on the terminal master’s degrees offered by the Yale School of Forestry & Environmental Studies (the Master of Forestry, Master of Forest Science, Master of Environmental Management, and Master of Environmental Science degrees), visit the School’s website, http://environment.yale.edu, or contact Admissions Director, Yale School of Forestry & Environmental Studies, 195 Prospect Street, New Haven CT 06611.

**REQUIRED COURSE**

All Ph.D. students are required to take the following course in the fall term of their first year. For a complete list of F&ES courses, see the School of Forestry & Environmental Studies bulletin, available online at https://bulletin.yale.edu; and Yale Course Search at https://courses.yale.edu.

**F&ES 900a, Doctoral Student Seminar and Responsible Conduct of Research**  Oswald Schmitz

This course provides the foundation for doctoral study at the School of Forestry & Environmental Studies. Students learn what it means to do scholarly research as well as become adept with philosophy of science and research methodology and proposal writing, as a basis for exploring diverse approaches to formulating and addressing research questions. Students work with their advisers to put these concepts and principles into practice to develop the basis for their dissertation research (including building bibliography, identifying and crafting research questions, formulating research hypotheses, and drafting a research proposal). Students further learn about funding opportunities and procedures for submitting grants. The course also covers professional ethics and responsible conduct of research, including ethical approaches to inquiry and measurement, data acquisition and management, authorship and publication, peer review, conflicts of interest, mentoring, collaborative research, and animal and human subjects research. Finally, the course explores ethical ways to advocate for the application of scholarly knowledge in the interest of environmental problem solving. Weekly assigned readings support concepts and issues addressed in class. Students present their embryonic research ideas in class and use feedback from the group to further develop their ideas.