

Subject: Temporary faculty position in GIS-informatics at Michigan

Faculty Position Opening in Environmental Informatics School of Natural Resources and Environment, University of Michigan

The School of Natural Resources and Environment (SNRE) at the University of Michigan (UM) seeks applicants for a full-time, nine-month visiting instructional faculty position (non tenure-track) in Environmental Informatics. The candidate will teach up to four graduate courses (approximately 100% effort) during the fall 2016 and winter 2017 semesters, including NRE 531 "Principles of GIS" in the fall term or in both terms; NRE 534 Spatial Modeling in the fall term; and an additional course or courses in the candidate's area of expertise. Applicants should have experience in using and applying GIS and spatial analysis in the study of natural resources, geography, or natural science or social science related to environmental applications.

NRE 531 "Principles of GIS" is a four credit course that involves three hours of lecture and two hours of laboratory sections per week. The aim of the course is to provide a firm understanding of the conceptual and technical issues that affect the use of geographic information for research and a variety of planning and management applications. Topics include maps and projections, raster and vector data structures, database design and construction, and spatial analysis based on spatial proximity, overlay, neighborhoods, networks, terrain, and modeling.

Weekly laboratory sections dovetail with concepts in lecture and will center on analysis of real-world problems and data using ArcGIS v10. In-class examples and laboratory problems should focus on natural resource, environmental, and ecological issues and experiments. For NRE 531, the candidate will supervise one to two (depending on enrollment) graduate student instructors (GSIs) who will instruct the laboratory sections.

For other courses, the candidate will instruct both lecture and laboratory components. NRE 534 Spatial Modeling explores various approaches to modeling landscape pattern and change. The focus is on understanding, describing, and predicting the two-dimensional patterns of land-use and land-cover that are observable in map-based depictions of landscapes. The course includes social and ecological processes and applications of statistical and computational models and GIS-based land modeling approaches, always with a geographical focus, including 7-8 exercises. Students completing the course will be able to evaluate the trade-offs associated with use of a particular modeling approach within a given situation, and to implement (at least minimally) several of the approaches discussed.

SNRE's mission is to contribute to the protection of the Earth's resources and the achievement of a sustainable society. The School contributes new scientific knowledge, visionary leadership, and trained professionals toward that end. The faculty of the School is diverse, with natural scientists, social scientists, engineers, and designers working collectively in an integrative setting. A professional school set within a major research university, SNRE provides a model of interdisciplinary and applied research and a focal point of research and teaching on sustainability. The successful candidate should possess the broad interests, skills, and temperament to interact effectively with faculty and graduate students across a wide range of disciplines.

Applicants must have completed all coursework and be PhD candidates in Geographic Information Systems (GIS), geography, natural resources, environmental sciences, or a closely related discipline. Desired qualifications include a completed PhD degree, postdoctoral experience, teaching experience, and experience in conducting and publishing research in environmental informatics or a related field. Depending on the successful candidate's qualifications and current position, the position will be filled at the visiting assistant professor (non tenure-track) or Lecturer 1 level.

Applications should include a cover letter, CV, a research paper, and a concise (1 page) statement describing your vision and approach to teaching environmental informatics courses in an interdisciplinary setting. Three letters of reference should be sent under separate cover to snre.jobs@umich.edu with the applicant's name in the subject line.

To apply, submit application materials (in a single PDF file), via the following web address:
<http://snre.umich.edu/form/faculty-nre-531-application>

Review of applications will begin on March 1, 2016 and will continue until a suitable candidate is hired. The position is expected to be filled by September 1, 2016. This position may be subject to the university LEO contract.

The University of Michigan is an equal opportunity employer, and individuals from under-represented groups are encouraged to apply.