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GEO 599 Responsible GIS Practice: Ethics for Future Geospatial Professionals

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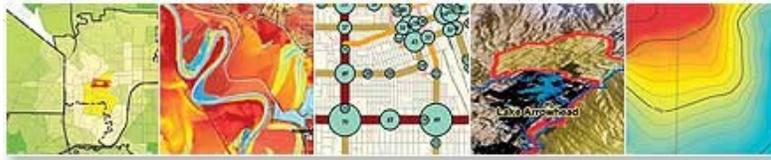


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GEO 599

Responsible GIS Practice: Ethics for Future Geospatial Professionals

Winter Term, 2009

2 credits

No Prerequisites

Course website: <http://dusk.geo.orst.edu/ethics>

Mondays 4:00-5:20, Wilkinson 203

Dr. Dawn Wright, dawn-at-dusk.geo.orst.edu

Office Hours: Tues/Thurs 12:15-1:15, or by appointment, Wilkinson 114

Interested undergrads welcome. GIS professionals also welcome to sit in.

Readings will be provided in class.

Course Description

Professionalism in today's geographic information science field (e.g., GIS, remote sensing, cartography, quantitative spatial analysis), now involves a commitment to ethical practice as informed by a more sophisticated understanding of the ethical implications of geographic technologies. For example, the use of GIS for military and surveillance purposes, the lack of privacy introduced by mobile mapping devices, and the use (misuse?) of GIS for conservation and sustainability continue to be challenging issues and topics of deep concern for many. Students and professionals working with GIS and related technologies should develop a sound grasp of these issues and a thorough comprehension of the concerns impacting their use and development in today's world. However, while most people agree that ethics matters for GIS, we often have difficulty putting ethical issues into practice.

This seminar seeks to bridge this gap by providing a sound basis for future ethical consideration of a variety of issues. Students will first investigate the nature of professions in general and the characteristics of a GIS profession in particular. They will hone moral reasoning skills through methodical analyses of case studies in relation to the GIS Code of Ethics and Rules of Conduct. They will also learn to unveil the "moral ecologies" of a profession through actual interviews with real practitioners in the field. Assignments will include readings, class discussions, practitioner interviews, and preparations of original case studies.

The seminar is part of an ongoing project supported by the National Science Foundation (NSF), and in collaboration with similar courses now in progress at Penn State University and the University of Minnesota. See <http://gisprofessionalethics.org> if interested in the NSF project.

This offering of GEO 599 will be accepted as an elective in the geographic information science (GIScience) concentration within the geography M.S. and Ph.D. degree programs or as an elective for GIScience certificates.

Discussion Topics Include...

- Research ethics and methods
- Defining the field of geographic information science & technology (GIS&T)
- What is the "moral ideal" of the GIS&T professions?
- Codes of ethics and rules of conduct in GIS&T professions

- Case studies of ethical problems in GIS&T (data access, lawsuits, privacy, surveillance, activism, emergency response, the "digital divide," and more)
- What would you do if....?

Learning Outcomes

By the end of this course, students should be able to:

- recognize ethical implications of geospatial technologies and applications;
- possess stronger and more sophisticated moral reasoning skills
- understand the "moral ecologies" of the various institutions and organizations that make up the geospatial professions; and
- be inspired to talk about ethics in the classroom and, more importantly, the workplace.

These additional learning outcomes fall under various categories in the [*UCGIS GIS & T Body of Knowledge*](#):

Unit GS6 - Ethical aspects...

- Describe a variety of philosophical frameworks upon which codes of professional ethics may be based.
- Discuss the ethical implications of a local government's decision to charge fees for its data.
- Describe a scenario in which you would find it necessary to report misconduct by a colleague or friend.
- Describe the individuals or groups to which GIS&T professionals have ethical obligations.
- Propose a resolution to a conflict between an obligation in the GIS Code of Ethics and organizations' proprietary interests.

Unit GS7 - Critical GIS...

- Defend or refute the argument that the "digital divide" that characterizes access to GIS&T perpetuates inequities among developed and developing nations, among socio-economic groups, and between individuals, community organizations, and public agencies and private firms.
- Discuss the ethical implications of the use of GIS&T as a surveillance technology.

Interviews and Case Studies

The central activity of the seminar is an interview with a GIS professional in the Corvallis or [greater Willamette Valley area](#). This involves preparation of background documentation, documentation of the interview, interview evaluation, and interview presentation, which you will assemble into a short report with corresponding sections. The purpose of the interview is to learn about the "moral ecology" of the organization within which the professional works. The interview may form the basis for an original case study. Or you may prepare a case study about a hypothetical situation.

Case studies will follow the structure of existing case study documents presented in class. Ultimately, the goal of preparing your own case studies is to increase:

- ethical sensitivity via the ability to identify and discriminate among ethical issues;
- ethical knowledge via familiarity with codes;
- ethical creativity via the ability to see "beyond the dilemma;" and
- judgment, given the increased likelihood that students will act appropriately (this cannot be determined solely in a class).

Both the interviews and the case studies will also provide valuable information to the [GIS Certification Institute](#), so that that it may improve the overall certification process, and increase the validity and impact of a certification and a Code of Ethics.

Students w/Special Challenges

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructors should know of, or who need special arrangements in the event of evacuation, should make an appointment with either instructor as early as possible, no later than the first week of the term. For further information regarding

accommodations for students with disabilities in this class, please see the SSD web site at: ssd.oregonstate.edu.

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