

GEOG 8291 Seminar on GIS and Society Fall 2008  
Meets Tuesdays 9/2 - 12/9, 1:20 - 3:30 PM

## Course Topic

# GIS Ethics: Accuracy and Responsibility

### Instructor

Francis Harvey  
468 Social Sciences  
612-625-2586  
[fharvey@umn.edu](mailto:fharvey@umn.edu)

Office hours Fall 2008: Tuesday 11AM - 1PM and Wednesday 4PM - 5PM

### Overview

Ethical questions related to the use of GIS have been an area of importance for many years. The use of GIS for military and surveillance purposes along with concerns about the impacts GIS has on NGOs and the environment have been challenging issues and remain topics of deep concern for people. Professionals working with GIS should develop a sound grasp of these issues and a thorough comprehension of the concerns impacting the use and development of GIS. However, while most people agree that ethics matters for GIS professionals, we often have great trouble putting ethical issues into practical action. This seminar sets out to bridge this gap and provide a sound basis for future ethical consideration of accuracy and responsibility issues.

This seminar, as part of a project supported by the National Science Foundation (NSF) and in collaboration with activities at Oregon State University and Pennsylvania State University engages students with a pragmatic approach to examining GIS ethics within the context of GIS professional work. It draws on the work of applied ethicists to approach questions of GIS ethics. This will be done through a series of interviews with GIS professionals from the Twin Cities area and through relevant readings.

The first part of the course consists of a review of relevant applied ethical concepts. This forms the foundation for interviews with area GIS specialists. Preparation, conduct, and evaluation of interviews are followed by a review of relevant GIS ethical issues and codes of ethics before concluding with presentation and a concluding discussion about the role of ethics for GIS accuracy concerns and matters of responsibility.

## Outcomes

This seminar takes up ethical issues related to GIS professionals. In this seminar we will focus on applied ethics, which is about what people do and feel as members of a profession, versus members of society. The seminar does not exclude theoretical issues, but are focus is on actual situations and their empirical contexts. In the seminar we will seek to find out what the effects are of what people do on others. Thus, the primary outcome of this seminar will be a heightened appreciation and knowledge of GIS related ethical issues for professionals. Other outcomes of the seminar include:

- share experiences with interviewing regional GIS users
- exercise good judgement in professional settings
- relate accuracy and responsibility issues to practical ethics
- develop interview skills and knowledge of regional GIS
- enhance holistic knowledge of the GIS profession

## Organization of the Seminar

### Overview

The schedule on the final page of the syllabus is the key reference for the organization of the seminar. Note that details for each seminar meeting are discussed in this text. Deliverables for any particular day are indicated on the course Moodle site.

The seminar is divided into four parts. In the first part we will do some background readings on ethical issues and IT. In classroom discussions and discuss GIS exemplars and the underlying ethical issues for GIS professionals. The second part of the seminar shifts to work on the interviews. We'll begin this section of the seminar with some preparation and discussion about conducting interviews and professional approaches and reflections on ethics. You will conduct interviews during the 10/21 week and prepare the analysis. Following a debriefing you will prepare a brief 15 minute presentation summarizing the preparation and emphasizing outcomes of the interview. After this empirical part of the seminar in the third part we move on to consider GIS Professional ethics. The fourth part is a closing discussion that will draw out key points from the seminar.

### Website

For this course there is a Moodle web site, which you should see when you log in to your moodle home page with your x500 id and password at moodle.umn.edu. The website is quite simple right now, but will evolve as needed to support class activities.

### Required Readings

The required readings from Quinn, M. (2009) *Ethics for the Information Age* (3rd Edition). New York: Addison-Wesley will be read for the first weeks' meetings. Please ob-

tain a copy for yourself and for future reference. Other journal articles and book chapters will be made available on-line for each week through the course Moodle page or placed on reserve in the main Geography Office (414 Social Science). After you make a copy of the readings or have copies made, please make sure that you return ALL THE ARTICLES AND ALL PAGES IN CORRECT ORDER into the folder. You are expected to have read the required readings prior to each meeting, Since many of the concepts discussed in the readings might be new to you, you may have to read some of the texts twice to fully understand them or consult additional sources.

## **Seminar Activities and Evaluation**

### **Short Discussion Sheet**

To encourage reflection on the course material you are expected to submit discussion sheets that consider and evaluate the readings. No summaries please. Reflections should include the two most important things you learnt from the readings. Questions may be divided into questions of clarification (issues that were hard to understand and for which some explanation would be important), and issues for debate. The discussion sheet should be sent to all participants and instructors over e-mail no later than the Monday evening (6 PM) prior to the class. When we read the ethical case studies, you will send all participants two questions for one of ethical issues cases, following a template distributed with the readings

### **Position Paper**

Each student will also be responsible to prepare one position paper for the seminar. You have two options:

- 1) a 5000 word essay on an ethical issue of significance for GIS professionals
- 2) a 5000 word review of issues and literature raised in one week's topics

Each position paper is a stand-alone document, fully referenced and formatted as follows. 12 Point Roman or Times Roman, 1" margins on all sides, page numbers bottom center, name in the header of each page. Single-spacing is fine. Figures should be placed in the text unless size dictates placing them on separate pages. Include a table of contents, list of figures, list of tables. A glossary and other additional material can be included if necessary. These do not count towards the word count. The paper should be submitted in pdf format by 5 PM on 12/12/2008.

The position paper will be evaluated using evaluation criteria posted on the Moodle website.

The position paper should set out a clear statement regarding a central issue or position. For example, a position paper could argue that the week's readings offer insufficient support that ethical codes protect the public.

### **GIS Professional Ethics Interview**

The central activity of the seminar is an interview with a GIS professional in the Twin Cities area. This involves preparation of background documentation, documentation of the interview, interview evaluation, and interview presentation, which you will assemble into a report with corresponding sections. See handout on interviews including a workflow diagram.

### **Grading**

All graduate students taking this course will register for A/F grades. Work related to the interview will determine 60% of the course grade (preparation of background documentation, documentation of the interview, interview evaluation, and interview presentation). The position paper will be worth 20% and 20% of the grade will be for participation (taking part in discussions, discussion sheets, preparation for seminar meetings, and contributions).

### **Schedule**

The seminar meets each Tuesday at 1:20 to 3:30 PM from 9/2 to 12/9/2008. See the course Moodle page for a schedule with weekly readings.

9/2 Course introduction and overview: Ethics, accuracy, responsibility in and for GIS

### Part 1: Background

9/9 IT Professional Ethics  
Readings from Quinn (Ch. 2: pp. 53-105 and Ch. 4: pp. 159-218)

9/16 IT Professional Ethics  
Readings from Quinn (Ch. 5: pp. 219-292 and Ch. 7: pp. 341- 384)

9/23 IT Professional Ethics  
Readings from Quinn (Ch. 8: pp. 386-427)

9/30 Ethical Codes/Case Studies (Readings at Moodle site)

### Part 2: Interviews

10/7 Cases and Interviews: Reading Cases/Designing Interviews

10/14 Cases and Interviews: Cases and Codes

- 10/21 Interview Week
- 10/28 Cases and Interviews: Debriefing
- 11/4 Interview Presentations and Discussion

### Part 3: GIS Ethic Topics

- 11/11 GIS Professional Ethics: Background
- 11/18 GIS Professional Ethics: Codes of Ethics
- 11/25 GIS Professional Ethics: Data Ethics

### Part 4: Presentations and Closing Discussion

- 12/2 Student Presentations
- 12/9 Student Presentations and Wrap-Up
- 12/12 Position paper due 5 PM