Geography 734: GIS and Society

Class Time: 3.30 to 6.10 pm, Thursday
Class Location: Bolton 768b
Office Hours: W10-11 am; R 2-3 pm; Or by appointment
Office Location: Bolton 478

COURSE OBJECTIVE: Geographic Information Systems (GIS) is widely used in a range of disciplines, and in public and private sector. Due to its popularity, it is a multi-billion dollar global business. In order to be proficient in it, one not only needs to understand the technology, but also the science behind the technology. This course explores a primary research agenda in GIScience, that of GIS and Society. This research agenda explores the interconnected relationship between the society and GIS, and explores the implications and impacts of such a relationship.

Within the GIS and Society body of literature (as highlighted by the University Consortium of Geographic Information Science), the following questions have been raised:

In what ways will GIS actually affect and alter the society it is intended to represent and serve? How can various conceptions and representations of space, not based on traditional map formats or geometric views, be embedded within a GIS? Is GIS more appropriate for some cultures than others? Can GIS be developed to reflect complex and ambiguous perceptions of social and physical space? How will GIS affect the relationships among and within government agencies, and between them and the various citizen groups concerned with the environment, property rights, and advocating the needs of local communities? What are the interpersonal implications of GIS? Can GIS provide citizens with an increased ability to monitor and hold government accountable for proposals and actions? Will GIS provide citizens with an understanding of their rights and interests in land? How accessible will spatial data and related GIS analysis tools be to all parts of society? Can GIS be used to increase participation in public decision making? (http://www.ucgis.org).

This course aims to answer some of these questions and intends to create a critical awareness of the hidden implications within GIS technology. This course is organized as a seminar, with weekly readings and reflection papers. Geography 525 (or consent of instructor) is the pre-requisite for this course.

ASSIGNMENTS & COURSE EVALUATION:
- Regular participation in class discussion: 60 points, 5 points will be deducted with every absence
Meaningful participation is expected every week from students. To do this, students must come to class having critically read that week’s scheduled reading and undertake informed discussions.

- **Written summary of weekly reading: 140 points (each 10 points)**
  This should be between one and a half to two pages long, double spaced document (point 12 font size). Must summarize the key points of the weekly readings. Points will be deducted for late submission (**5 point deduction per late day**).

**Grade:** The percentage necessary to receive certain grades will be no higher than the following: 88% (A-), 78% (B-), 68% (C-), 58% (D-)

**READINGS:**
The readings are available on the [library’s electronic reserve website](#).

**WEEKLY SCHEDULE & READINGS**
Weekly readings are assigned below. To facilitate discussion, readings must be completed prior to the appropriate session. The outline may be subject to change (with advance warning) so please assume responsibility for keeping up with classroom announcements.

**Week 1, Jan 23**
**Evolution of GIS and Society Research Agenda**


**Week 2, Jan 30**
**GIS and Ethics**


**Week 3, Feb. 6**

**GIS Diffusion, Use in Urban Planning**


**Week 4, Feb. 13**

**GIS Implementation in Organizations**


**Week 5, Feb. 20**

**The Technocratic Nature of GIS**


**Week 6, Feb. 27**

**GIS and Democracy**


**Week 7, March 6**

**Digital Divide in GIS**


**Week 8, March 13**

**Public Participation GIS**


**Week 9, March 20**
No class – spring break

**Week 10, March 27**
**PPGIS: Barriers, Models, And Local Contextual Factors**


**Week 11, April 3**
**PPGIS in the Urban Context**


Week 12, April 10
PPGIS in the Environmental Context


Week 13 April 17
Critical GIS


Week 14 April 24
Critical GIS


**Week 15 May 1**

**Critical GIS**


**Week 16, May 8**

What have we learnt? Discussions based on the semester’s readings. New research directions?

*No class on finals week*