

**The Ohio State University
Freshman Seminar Program
Proposal Sheet**

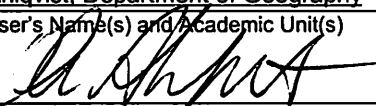
Course Information.

1. Attach a sample syllabus that includes the following. Sample syllabi can be found at <http://freshmanseminars.osu.edu>.
 - a) The course goals,
 - b) A brief description of the content,
 - c) The distribution of meeting times,
 - d) A weekly topical outline,
 - e) A listing of assignments,
 - f) Grade assessment information (including whether the course will be graded by letter grades or Satisfactory/Unsatisfactory),
 - g) The required textbooks and/or reading list, and
 - h) The academic misconduct and disability services statements (sample statements can be found at <http://artsandsciences.osu.edu/currofc/resources.cfm>).

2. Attach a brief biographical paragraph that includes the current research interests, teaching awards and honors, and undergraduate courses taught by the participating instructor(s). The paragraph will be included in materials for first-year students.

Ola Ahlqvist, Department of Geography

Proposer's Name(s) and Academic Unit(s)


Signature(s) of Proposer(s)

ahlqvist.1@osu.edu

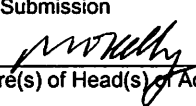
E-mail Address(es) of Proposer(s)

247-7997

Contact Phone Number

2/28/2011

Date of Submission


Signature(s) of Head(s) of Academic Unit(s)

2/28/11

Please indicate how many quarters you would like to offer the seminar and which quarters: 1 AU 1 WI 1 SP

This request form and the attachments should be mailed to the Director, Chinwe Okpalaoka, 154G Denney Hall, 164 W. 17th Avenue, or e-mailed to okpalaoka.2@osu.edu. For additional information, please call 292-4661.

The Geospatial Revolution

—

how and why maps became a central part of our lives (even if you don't think so)

Arts & Sciences 138., Freshman Seminar**
Quarter, 2 of credits
Day/Time Room

Instructor
Ola Ahlqvist

Office
1049B Derby Hall

e-mail
ahlqvist.1@osu.edu

Office Hours
Tuesdays/1-3pm

Course Description

Geographic information technologies such as online maps, GPS, smartphones, digital globes, and location based social media are increasingly becoming part of our daily lives. Some call this the “Geospatial Revolution” but what is this revolution all about? How does it work? What does it mean to you and me? We will look into examples of these technologies and their underlying theory through readings, videos, and practical exercises. The goal of this seminar is to provide students with an introduction to the increasing presence of spatial technology in our daily lives, both as scholars and private citizens, and to the many possible issues and implications of these technologies on society.

Texts

The readings consist of articles from scientific journals, selected to be very accessible to a broader audience, usually short and of overview or review character. Students will typically have one article to read as preparation for each class. In some cases a video will complement the reading. During the class we will discuss the reading and make sure to identify some main points. After most classes you will submit a short commentary (100-200 words) on the subject to a Carmen discussion set up for each weekly topic.

Course Policies

Detail your expectations for:

- Attendance is mandatory. Participation will be part of the grade and you have to attend at least 8 of the 10 weekly meetings to get a passing grade. Attendance means active participation in class discussion, not just showing up.
- Students will have to complete 6 written assignments in which they provide a commentary on the weekly topic and reading. In addition students will do two online practical tutorials and a final oral presentation of some particular issue of their interest that connect to the course content.

Grading

The course will be graded Satisfactory/Unsatisfactory based on completing 75% of the course work and this is approximately distributed as 80% written/oral assignments, 20% participation.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp).

Students with Disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Weekly Schedule

The class meets once every week for 1 hour and 48 minutes.

Week 1 – The geospatial revolution -what is it?

Geospatial technologies are currently revolutionizing our workplace and everyday life—from government and business operations to leisure activities. But how are today's maps different from the ones you used in your 5th-grade geography class?

READ: Watch all three episodes of the Geospatial revolution online

DUE: Carmen discussion comment before next meeting

Week 2 – Introduction to mapping on the web

This week we will perform some basic mapping tasks by collecting data and entering it through Google Maps and Google Earth.

READ: Tutorials online

DUE: Completed tutorial before next meeting

Week 3 – Representing geographic knowledge

To put spatial information on a map requires abstraction, simplification, generalization. This week will look deeper into the theory of spatial information.

READ: ***

DUE: Carmen discussion comment before next meeting

Week 4 – Information semantics – the sorites paradox and vague geographies

READ: Watch “The Englishman who went up a hill and came down a mountain”, then read

Fisher, P., & Wood, J. (1998). What is a Mountain? or The Englishman who went up a Boolean Geographical concept but realised it was Fuzzy. *Geography*, 83(3), 247-256.
DUE: Carmen discussion comment before next meeting

Week 5 – Down to the nuts and bolts – how does it all work?

Obviously, online maps and virtual globes use all kinds of sophisticated technologies, but some of the core technologies to make it work are fairly accessible. This week we will feature a practical investigation by manipulating some online maps to show what we want them to show.
READ: Online tutorials
DUE: Completed tutorial before next meeting

Week 6 – Maps for modeling, simulation, and games

Most of you have played Monopoly, and by doing that you have also engaged in socio-economic modeling and performed a simulation. This week we will look closer at these activities and how maps play a critical and growing role in environmental and public policy scenarios.
READ: Watch Jane McGonigal's TED talk, then read Kim, J. Y., Allen, J. P., & Lee, E. (2008). Alternate reality gaming. *Communications of the ACM*, 51(2), 36-42.
DUE: Carmen discussion comment before next meeting

Week 7 – Social implications of the geospatial revolution

The spatial traces that we all leave as part of daily activities are not only a fantastic data source for all kinds of applications, but also of concern from a privacy perspective. The social implications of the geospatial revolution opens a whole new field for investigation – computational social science - outlined in two short perspectives papers.
READ: Lazer, D., et al. (2009). Computational Social Science. *Science*, 323, 721-723. Mitchell, T. M. (2009). Mining Our Reality. *Science*, 326(5960), 1644-1645.
DUE: Carmen discussion comment before next meeting

Week 8 – Volunteered geographic information - crowdsourcing

Increasingly, modern geospatial technology makes it possible for anyone to contribute with knowledge and construct maps from many small pieces of volunteered information. We look at recent examples of this phenomenon.
READ: Zook, M., Graham, M., Shelton, T., Gorman, S. (2010). "Volunteered geographic information and crowdsourcing disaster relief: a case study of the Haitian earthquake." *World Medical and Health Policy* 2(2): 7-33.
DUE: Carmen discussion comment before next meeting

Week 9 – Student led presentation

This week will feature presentations of ideas and commentaries from students on the course subject.

Week 10 – Student led presentations

This week will feature presentations of ideas and commentaries from students on the course subject.