

**Geography 597E**  
**Land Change Science Seminar**  
**Spring Semester 2008**  
**2-3 Credits**

**Syllabus**

**Instructor:** Doug Miller

**Office:** 317G, Earth-Engineering Sciences Bldg.

**Office Hours:** Immediately following class; By Appointment

**Phone:** 863-7207

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**Course Meeting Time:** TBD

**Text:** None

**Course Description:**

Human impacts on the landscape are now widely recognized as primary drivers of environmental change at local, regional, and even global scales. An emergent new field of endeavor, *land change science*, shows strong promise as an integrative discipline that will forge new ways of linking the social, natural, and geographical information sciences to address our understanding of the dynamics of land systems.

This seminar will explore the tenets of the newly emerging specialty with an emphasis on understanding the complex spatial – temporal dynamics of land systems. Course structure will involve readings, synopsis writings, group discussions, and individual and group projects. Individual and group projects are undertaken for the optional 3<sup>rd</sup> credit.

**Schedule:** One two hour session/week; Other meetings as needed.

Topics (with approximate weeks for each)

- 2 Land Change and Land Change Science
  - Definitions
  - Needs
- 3 Land Change Drivers
- 3 Land Change Data and Metrics
- 3 Analysis Techniques
- 2 Land Change Modeling and Forecasting
- 2 Synopsis

Note: This schedule is very approximate. The class may choose to modify times/topics as we progress through the semester.

**Grading Policy:** Final grades in Geography 597B will be determined using the following scale:

A	93+
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	76-79
C	70-75
D	60-69
F	<60

Student evaluation will consist of the following components:

- Attendance and Active Participation: (80%)
  - Attendance/Participation in Discussion
  - Session Leadership
- Reading/Writing Assignments: (20%)
  - Weekly Reading Assignments
  - 1 Page Written Summary/Outline

**Attendance Policy:** Attendance is required and will be recorded. This will only be a successful class for all of us if everyone is committed to attending all class sessions.

**Academic Integrity:** Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity in the College of Earth and Mineral Sciences, and all members of the College are expected to act in accordance with this principle. Consistent with this expectation, all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

The full EMS Integrity Policy may be found at:  
<http://www.ems.psu.edu/students/integrity/statement.html>