

Seminar on Land Change Science

Fall 2013

GRG396T (Unique # 37545)

When: Tuesday: 4 – 7 pm, CLA 4.106

Dr. Eugenio Arima

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Office Hours: by appointment

Course description: This graduate level course will survey the current and past literature in the field of land change science. The course is divided into five major parts: part I) addresses the emergence of land change science as a fundamental component of environmental research; II) investigates the causes and drivers of land change and its theoretical foundations across certain social sciences' disciplines; III) provides a glimpse of the land cover monitoring & characterization and modeling literature; IV) looks into the synergies and impacts of land change on other systems. Finally, part V) investigates the recent literature on forest transition, indirect land change, and land sharing/sparing and future directions of the field.

Format: Seminar. Three to four journal articles will be assigned weekly. Students are expected to do all the assigned readings. Each week two students will be responsible for giving a 15 min summary of the articles and getting discussions started by providing a few questions or comments to the group. I will provide additional comments only if necessary.

Goals: like any other interdisciplinary field of inquiry, land change science is vast and impossible to be thoroughly covered in one semester. Therefore, I have specific learning objectives that I hope you will attain. One goal is to place the origins of LCS within geography's human-environment tradition. Second, although this is not a nature-society seminar, it is important to recognize the different paradigms and traditions within the discipline such as political ecology and critical theory. Bid-rent theory will comprise a week of readings because I consider it foundational to the field. I will also try to make a point about 'behavioral models' in our discussions and how they have been used to explain landscape patterns. A final goal is to expose you to the more recent literature and future directions of the field. I hope you will appreciate the depth and breadth of the discipline.

Grading: will be based on the following requirements:

- 1) Weekly reading journal (25%), two pages long, double-spaced due a week after the readings and discussions where you will summarize the major topics discussed, contribution of the articles to the field, and potential criticisms. Please use your own words when writing. Grades will be based on the system: check+, check, check-, zero (not submitted).
- 2) Lead discussions twice (or more), depending on class size (15%)
- 3) Attendance and participation (20%)

- 4) A research paper of approximately 20 pages in length (40%), double-space due on December 6th. A title, abstract, and short bibliography will be due on Nov 19th. A preliminary draft submission is not required but I will read and provide feedback if you so desire. Your final paper should be directly related to Land Change Science. A topic, region, or scale that is not adequately covered here would be a good place to start if you do not have ideas about your final paper... Please come to my office to discuss your topic as soon as you are ready.

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