Instructor:
Arun Agrawal, 4032 Dana, Phone: 734 647 5948: Email: arunagra@umich.edu
Office Hours: Wednesday 11:00-1:00 and by appointment

Guests and Visitors:
Catherine Tucker, Indiana University, Bloomington (IFRI background and research)
Pete Newton (lectures, field work/practical sessions)
Wen Liang (Database instruction)
Julie England (Database instruction)

Weekly Schedule: THIS IS A 10-WEEK COURSE

Please note that lecture sessions will typically be on Fridays from 1200-3:00 pm and fieldwork will be on three Saturdays from 9:30 am- 3:30 pm at the Arboretum. We will arrange for lunch during the Saturday field work sessions

Course Expectations

The course will focus on 3 learning areas: instruction for two will occur inside the classroom and for one, it will be based on field activities

1. Concepts and theories related to natural resource governance;
2. Approaches and methods related to natural resource governance;
3. Social and ecological data collection methods in relation to the analysis of coupled natural and human systems;

Completion of this course will enable students to engage in particular with the research carried out by the International Forestry Resources and Institutions research program, and also to adapt the theories, methods, and approaches relevant to other research efforts that seriously engage with the social, institutional, and ecological drivers of resource governance outcomes.

Learning Area 1 (concepts and theories) goals:
a) Introduce students to classical and other more recent writings on natural resource governance with a particular focus on forests, introduce work on collective action and to different approaches to understanding research on renewable natural resource governance. (weeks 1-3); Identify and discuss the theoretical bases and concepts of collective action theory,
This research seminar is designed for University of Michigan graduate students in diverse disciplines who are interested in multi-method research techniques for understanding local level resource governance (with a focus on forests), and for international researchers interested in learning data collection and analytical methods that can be applied to understand natural resource management. The topics to be covered during the semester will include background readings related to our efforts to assess institutional arrangements, resource conditions, the activities of social groups, and their impact on resource conditions over time. We will use the concrete example of the International Forestry Resources and Institutions (IFRI) research program throughout the course.

All class members will work closely together so that both learn how to apply theory, do fieldwork, record fieldwork data, and analyze data. Students will be responsible for writing the final report for the 2012 training site and will participate in the discussion of their plans and contribute ideas to the development of future research programs in several countries.

In addition to the stated classroom time for all participants, we have a number of field trips and guided meetings, most of them on Saturdays, for social and ecological data collection, data analysis, and writing.
Logistics

The course schedule is intense and complex. Because we have so much to cover in such a short period of time, please arrive to class and other course activities a few minutes before they start, especially fieldwork events. (If the weather is poor, we advise you to arrive even earlier.) As with all fieldwork, we will encounter unforeseen challenges. Cooperation and patience are fundamental.

Course Requirements and Grading

1. **Participation, Field Notes (20%)**:  
   Participate in fieldwork and class discussions. Complete assignments given in class.  
   Write field notes following field visits and household interviews. Post field notes to the online course site by 10:00 a.m. the following Monday.

2. **Article Presentation (25%)**:  
   Present an assigned article orally to the class (15 minute maximum). The presentation should identify the author's central question, research design, methods, data, and findings. The presentation must identify at least one way the study could be improved and evaluate its relevance for the ongoing case study.

3. **Midterm Examination (30%)**:  
   Complete a take-home midterm that covers all the material assigned in class.

4. **Survey design and implementation (25%)**:  
   Be responsible for designing a short survey in teams of two individuals. Administer it to five respondents. Report on your work.
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Week 1, Session 1 (Sept. 7): Introduction
IFRI Class Introduction

Class Themes
Introduction to course, instructors and class participants; course goals and responsibilities; syllabus, initial lecture

Assignment
Participants will be assigned IFRI forms for discussion in future class periods.

Readings


Recommended

Relevant Websites
IUCN: [http://iucn.org/themes/forests/index.html](http://iucn.org/themes/forests/index.html)

Week 2 – (Sept. 14): Foundations of resource governance: Collective action theory

Class themes
Theoretical foundations of collective action
Common property and institutional analysis
Framework for forest management research and IFRI conceptual model
Introduction to different property rights regimes (e.g. private, common property, state etc.)
Local management institutions
Monitoring and rule enforcement

Class assignment
Discuss the relationship between common property management and the problem of collective action
Readings
--Ashwini Chhatre and Arun Agrawal. 2008. Forest Commons and Local Enforcement. PNAS.

Suggested readings


Assignments
1. Students will collect and review one/or two case studies using political ecological, common property, or CNH framework for analysis
2. Identify what you see as the major differences between work on CPR theory, coupled natural and human systems, Natural resource policy analysis

Reading

**Recommended Readings**

**Week 4 (Sept. 28): Research design and proposal development**
**Readings:**
- Sutherland, William J. (2006) Planning a research programme Centre for Ecology, Evolution and Conservation, School of Biological Sciences, University of East Anglia, Norwich NR4 7TJ, UK

**Week 5: (Oct. 5): Basics of survey data collection and questionnaire development**
**Readings:**
- Tucker, Catherine. (Forthcoming 2013) Institutional Evolution, Forest Conservation, And Rapid Change In Rural Honduras Forthcoming in Human-Environment Interactions, E.S. Brondizio and E. F. Moran, eds.Springer Science + Business Media Dordrecht 2013

**Week 6 (Oct. 12): Explaining Natural Resource Governance Outcomes: Institutions and Social Capital**
**Class theme**
1. Presentation and discussion on social capital (social networks, habits of cooperation and bonds of reciprocity, trust etc.); Social capital and natural resource management (forest commons)
2. Research design and data collection
3. Applying research question development to selected site and data collection

**Assignments:**
1. Does social capital play an independent role in influencing resource management outcomes?
2. Identify one or two research questions around which forest and social survey data can be analyzed, and the site report be written up for the fieldwork you are conducting.

**Readings**


**Suggested readings:**


**Mid Term Examination – Students receive questions for the Examination in class (responses due on Friday next week by 5:00 P.M.)**

**Week 7 (Oct. 19): Explaining Natural Resource Governance Outcomes: Property Rights, Enforcement, Group Size and Heterogeneity**

**Themes**

Role of group size, group heterogeneity, and enforcement in improving natural resource governance outcomes

**Assignment:**

Propose two hypotheses that can be tested using data on how property rights, group size, or other socio-economic variables will influence renewable resource outcomes; what data will be necessary to test these hypotheses?

**Readings:**


**Week 8 (Oct. 26): Theory and Practice: Market based approaches and ecosystem Services**

--Theoretical Foundations, Practical Applications--Ecosystem Services: Biodiversity conservation, local livelihoods (equity, sustainability), Carbon Sequestration

**Readings:**


**Suggested Readings:**


**Week 9 (Nov. 2): Theory and practice: Changing attitudes and subjectivities**

How necessary are changes in people’s attitudes for effective resource governance to occur?

**Readings:**


**Week 10 (Nov. 9): Theory and practice: Multiple outcomes**
Do resource systems always produce multiple outcomes? When are there tradeoffs vs synergies across these outcomes? How can we understand and manage tradeoffs?

Readings:
FIELD SESSIONS
All field sessions will be on Saturdays and will last from 9:30-3:30. Field data collection will occur in the University of Michigan Arboretum.
Lunch will be provided 😊

Week 6 (Oct. 6, 9:30am - 3:30 pm): Initial field Visit and familiarization with the site
Special Note: Meet at SNRE – 440 Church Street at 9:15 a.m. Bring a field notebook and a pen or pencil.

Assignment
Write up one page of field notes and post to C-Tools by 10:00 a.m. on Monday.

Readings

Week 7: (Oct. 13, 9:30am-3:30) Forest Mensuration
Special Notes: Field plot data collection work in the forest site.

Assignments
Graduate students are responsible for turning in legible, completed plot forms from their group’s work in the forest.

Class Themes
How IFRI measures forests
Forest mensuration techniques (Visual demonstration for using different pieces of equipment)

Readings for class meeting


Week 8 (October 20, 9:30-3:30): **Field work: Surveys**
Special notes: Interviews with site users about how they use the forest and the location

**Assignment:**
Write up one page of field notes and post to ctools by Monday of next week

**Data Sessions: TBA**