ANTHROPOLOGY 5193
PRO-SEMINAR COMPLEX SYSTEMS

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Spring 2013
M 10:00-12:45
4094 Smith Laboratory

Office hours: R12-3PM or by appointment

COURSE DESCRIPTION

The goal of the course is to introduce students to research and teaching in complexity and complex systems in different disciplines across the university. Students will learn about the ways that researchers from different disciplines conceptualize and study complex systems. This course will be taught as a seminar. This means that students share responsibility for the success of the course and have to come to class prepared, i.e., having read and reflected on the readings.

DISABILITY SERVICES

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 in room 150 Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities.

LEARNING OUTCOMES

Students will learn how different disciplines conceptualize and study complex systems through interactions with researchers from different disciplines and writing a conceptual paper about complex systems

REQUIRED READING

The following books are required reading and available in the OSU Book Store or through online booksellers like Amazon.com. Additional required and recommended readings will be made available through Carmen.


COURSE REQUIREMENTS AND EVALUATION

Attendance and participation: You are expected to be actively engaged in class; that is, coming to class prepared, paying attention, and contributing to discussions and problem solving, both by making comments and by facilitating other people’s participation. Because it is difficult to do well in the course if sessions are missed attendance at every class meeting is required. Late arrival and early departure are considered poor participation; they are disruptive to others and make it likely to miss essential information. Please contact me if there is an emergency situation. If you are ill and must miss a class, you are responsible for getting the notes and assignment information from your classmates.

Readings: You are expected to have read the assigned readings once or twice before you come to class. As you read, highlight, take notes, summarize, look up new words or concepts, and come with questions for me and/or your classmates. In short, be prepared to discuss the readings in class and bring the readings to class. I also recommend you to go over the readings once more after class.

Leading discussion: Students will responsible for leading discussion once in the quarter. After the speaker’s presentation, they will facilitate discussion in the class.

Conceptual Paper: Students will write one conceptual paper in which they compare and contrast how different disciplines conceptualize and study one aspect of complexity theory and/or complex systems (e.g., emergence, networks, resilience). In the last two weeks of the quarter students will present their work on the conceptual paper in class.

Evaluation: Course responsibilities will be weighted in the following way:

<table>
<thead>
<tr>
<th>Course Responsibility</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Attendance and participation</td>
<td>25%</td>
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<tr>
<td>Leading discussion</td>
<td>15%</td>
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<tr>
<td>Presentation</td>
<td>25%</td>
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<tr>
<td>Conceptual paper</td>
<td>35%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Final grades are based on the OSU Standard Scheme. A general guide to how you are doing is: A 93; A- 90-92; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; C- 70-72; D+ 67-69; D 60-66; E< 60.

Special notes from the instructor:

- Only in cases of properly documented illness or personal emergency will late assignments be accepted. Late assignments will progressively lose value and will be evaluated and returned as time allows.
- I use Carmen to post information for the class (e.g., syllabus, cancelled office hours, changes in reading assignments). Check it regularly.
- All students should become familiar with the rules governing academic misconduct (e.g., cheating, plagiarism). Ignorance of these rules is not an acceptable defense. Anyone violating said rules will be reported to the Board of Academic Misconduct. If you have any questions, please see me.
SCHEDULE AND TOPICS

WEEK 1
• Introduction to the course

WEEK 2-14
• Guest speaker from departments and colleges across campus. Guest speakers will assign readings for that particular day. After presentation by guest speaker, students will discuss presentation, readings, and in particular how researchers in the guest speaker’s discipline conceptualize and study complex systems. A list of potential speakers:
  o Virginia Folcik, Davis Heart and Lung Research Institute
  o Ian Hamilton, Evolution, Ecology and Organismal Biology and Mathematics
  o Elena Irwin, Agricultural, Environmental, and Development Economics
  o Ciriya Jayaprakash, Physics
  o Marianna Klocko, Sociology
  o Blaine Lilly, Integrated Systems Engineering and Mechanical Engineering
  o Morgan Liu, Near Eastern Languages and Cultures
  o Yuan Lou, Mathematics
  o Nicanor Moldovan, Internal Medicine
  o Mark Moritz, Anthropology
  o Hazel Morrow-Jones, City and Regional Planning
  o Darla Munroe, Geography
  o Kevin Passino, Electrical and Computer Engineering
  o Craig Volden, Political Science
  o Keith Warren, College of Social Work
  o Bruce Weinberg, Economics
  o David Woods, Integrated Systems Engineering
  o Ningchuan Xiao, Geography

WEEK 15-16
• Student presentations of their conceptual papers