Spatial Dimensions of Decision-Making in Social-Ecological Systems

(Human Geography Seminar) – GEOG 940

University of Nebraska-Lincoln College of Arts and Sciences School of Global Integrative Studies Fall 2022

Class meetings

Room: 308 Oldfather Hall Lecture: M 2:30-4:50

Instructor

Dr. Patrick Bitterman Office: 932 Oldfather Hall Email: <u>patrick.bitterman@unl.edu</u> Office Hours: M 12:30-2pm, or by appointment

Department Chair

Dr. Sophia Perdikaris Office: 816A Oldfather Hall Email: <u>sperdikaris2@unl.edu</u> Phone: 402.472.2114

Course description

Issues of natural resource governance are embedded in complex, adaptive, social-ecological systems that connect social and biophysical structures, processes, and legacies. This graduate seminar will explore the foundational theories, frameworks, and contemporary models related to the social-ecological governance, with an emphasis on the influences of geographic context, spatial scale, and network structure on decision-making. Students will gain an increased conceptual understanding of system dynamics, as well as knowledge of how real-world processes affect adaptive capacity in Nebraska and other settings. We will also investigate statistical and dynamic models that help policymakers make decisions under uncertain conditions.

Learning objectives

By the end of the term, students will be able to successfully:

- Describe the leading and foundational theories of social-ecological governance
- Analyze academic writing
- Conduct an academic literature review
- Understand methods for measuring, modeling, and analyzing social-ecological systems function

Prerequisites

None

Required materials

All materials will be provided via Canvas.

Course policies

Class format

This course will be conducted as a graduate level seminar in which students are expected to lead and engage in discussion regarding the readings and assignments at hand. There is much to be learned

from the perspectives and experiences of others, and I encourage you to share your personal and professional experiences in reference to in-class discussions and assignments.

As the instructor for this course, I understand my role to be:

- 1. a facilitator who is responsible for keeping discussion on track
- 2. an expert in resilience, coupled human-environmental systems, and geospatial analysis subject to limitations on my own knowledge and ability
- 3. an evaluator of your progress in achieving course objectives.

This course meets weekly. Therefore, we will have limited class meetings during the semester. Readings and/or assignments will be required for each class period. To avoid falling behind, it is imperative that you keep up with the assignments. You should come to class prepared to take notes, ask questions, and share your ideas.

Attendance and participation

Students are expected to attend all class meetings. This is a discussion-based course, meaning that your attentiveness and participation in group discussion is extremely important. While attendance will not be taken, participation in discussion is graded. If missing a class is unavoidable, please contact me in advance by **email**.

The key to a successful class experience is participation, which in turn relies on students reading the material, attending class meetings, completing work in a timely manner, and discussing the material and related issues.

In-class discussion should include:

- 1. demonstration that the student has read and understood class material;
- 2. discussion arguments that evidence creativity and logical structure;
- 3. consistent participation without monopolizing the discussion; and
- 4. constructive and critical examination of issues couched in an atmosphere of civility and mutual respect.

Late work

Unless otherwise noted:

- all assignments are due on the specified due date in Canvas.
- late items will be accepted, but a 20% penalty will be applied for each calendar day the item is late

Changes to the syllabus

Any changes to the syllabus will be communicated via email and posted on Canvas.

Use of proper citation methods

The advancement of knowledge is predicated on building upon the foundation set by collective work of others. Therefore, it is very important to ascribe credit to those that created original materials and produced original work(s). All sources of information used in your work should be cited using appropriate methods and standards. You are expected to fully reference the material(s) you draw upon within your analysis. <u>Again, I expect you to provide accurate and complete references for all</u> <u>materials</u>. As you will be directly quoting multiple sources, you will also need to provide a list of references. You may format your citations following APA, Chicago, or other appropriate styles (e.g., the format of an established academic journal) with one exception. Do **NOT** use a footnote-style citation method. There are multiple external resources to help with citation methods (e.g., Purdue

University's OWL). Further, citation software (e.g., Zotero, Mendeley), some of which are free or low-cost, can greatly simplify this work and automate the process.

Collaboration

This class has collaborative components, but all work turned in must be your own. Students who do not follow this policy will be reported to the College for academic dishonesty. If you have questions regarding this policy, it is your responsibility to ask them.

Your Responsibilities

You have a responsibility to help create a classroom environment where all may learn. At the most basic level, this means you will respect the other members of the class and the instructor and you will treat them with the courtesy you expect to receive in return. This policy applies to all forms of communication in this course. Any email correspondence **MUST** be conducted via your UNL email address.

Miscellany

Be honest and have integrity in your work. For example, do not increase the perceived length of a paper by increasing the size of punctuation or manipulating spacing. Be kind and be polite. Do not interrupt – let others finish talking before speaking in disagreement (or agreement!). Limit laptop and phone use to appropriate and necessary activity. Finally, you will get out of this class what you put into it – come prepared, participate, and be attentive, and you will be successful.

Preparing for class

- Read relevant materials. Preparation and participation are necessary for a successful seminar.
- If there are topics you would like to hear more about, please share your ideas
- Take advantage of office hours
- Do not leave assignments until the last minute

Assessment

Participation

The key to a successful seminar is participation, which requires student preparation. This includes reading the materials, attending class meetings, and discussing the materials. This seminar is *student-led*, which means you need to engage with your peers in intellectual discourse.

Grades for participation are based on the following:

- 1. demonstration the student has read and understood course material;
- 2. discussion arguments that demonstrate creativity and logical reasoning;
- 3. consistent and coherent discussion without monopolizing the discussion; and
- 4. constructive and critical examination of issues while maintaining civility and respect for others.

Each student is responsible for posting 3 questions or issues for clarification from the readings to the Canvas site prior to each class meeting. These should be posted no later than 8am on the day of the class. The discussion leaders will use these questions and issues in their leadership of that week's materials.

Discussion leadership

Each student will lead 2 seminars, including a presentation of that week's material and a facilitation of class discussion. Students will work in teams of two for the first presentation and work alone for the second. The students are responsible for presenting the material in a cohesive and synthetic manner. During classes in which students work in a team, students will first provide a formal presentation (i.e., with slides) that summarizes the material and introduces necessary background

information, then will facilitate a class discussion. For classes in which students work alone, students will first provide an informal summary of the articles (i.e., without slides, unless desired), then will facilitate a discussion.

Discussion leaders must also suggest one alternative readings. Note: any changes must be announced during the preceding class, so other students have time to prepare. **Plan ahead**.

The presentation and ensuing discussion will be evaluated according to the extent to which the student(s):

- 1. demonstrates that they have a command of all the material for that day;
- 2. summarizes the key issues that are raised by the readings;
- 3. synthesizes the common threads throughout the assigned readings;
- 3. raises important and critical questions; and
- 4. leads and moderates class discussion.

Deliverables:

- 1. Each group must give a presentation (20 minutes) synthesizing the readings for the week, and a moderation of discussion (approximately 60 min). Each group member is expected to contribute equally to the preparation of the presentation and is required to speak for approximately equal time. Individual oral presentations can be 10 minutes, followed by discussion.
- 2. Presentations must be submitted to Canvas prior to class.

Annotated bibliographies

You are required to complete 3 annotated bibliographies covering the readings early in the semester (see Canvas for dates). An annotated bibliography contains approximately 2 paragraphs highlighting the main points for each assigned article, your critiques (if any), and other thoughts or questions.

Literature review

Each student will write a literature review that stems from class material but focuses by and large on additional material gathered for the review. This work may be related to graduate proposals, research papers for the Geography PhD program, a reading list for preliminary examinations, a comprehensive doctoral paper or master's thesis, or a part of a dissertation literature review. Work related to other graduate research is strongly encouraged as long as it is not being submitted for credit in another course.

Deliverables:

- 1. Outline. The outline is comprised of a short abstract and outline of the planned paper. The abstract is about 200 words and captures the essence of the topic on which you will write your final paper. The outline indicates the sections and topics that you will cover in the paper. Each section and subsection should have a heading and a short description of the subject matter.
- 2. Draft literature review. The draft builds on your outline. All sections and subsections that will appear in the final review should be in the draft; the key difference between these two versions is that the draft paper will likely have a paragraph or two per section, while the final paper will have a page or more per section. You are encouraged to go beyond this minimum, however, and submit a draft that has both breadth and depth, to get the most out of feedback. The draft must at least 2500 words excluding abstract, graphics, and bibliography. It must have at least 20 references. These drafts will form the basis for in-class peer review.

3. Final literature review. The final review is a complete and polished paper that meets all the features described in writing a literature review. Formatting for the final review must follow the guidelines for writing a research report. The final report must be 6000-8000 words excluding abstract, graphics, bibliography, and appendices. The review must have at least 30 references.

All completed assignments must be submitted to the course Canvas site. No other submissions will be accepted. Do NOT email me your completed homework.

All assignments should be submitted to the corresponding Canvas assignment before the due date.

Evaluation scale

Grade	Minimum % of Points	Grade	Minimum % of Points	Grade	Minimum % of Points	Grade	Minimum % of Points
		B+	87	C+	77	D+	67
А	92	В	82	С	72	D	62
A-	90	B-	80	C-	70	D-	60
						F	Below 60

Grades will be based on the following:

Assessment	Total points
Participation	150
Discussion leadership	150
Annetated hiblic graphics on Weaks 4.6 (2 hibs 50 points each)	150
Annotated bibliographies on Weeks 4-6 (3 bibs, 50 points each)	150
Writing workshop peer feedback	100
Literature review	
Outline	50
Draft	100
Final paper	300
Total	1000

Week	Date	Торіс	Discussion
			leader(s)
1	8/22	Course introduction	PB
2	8/29	Coupled systems frameworks	PB
3	9/5	Labor Day, no class	
4	9/12	Complexity and emergence (annotated bib #1 due)	JY, ES
5	9/19	Social-ecological resilience (annotated bib #2 due)	UJ, SB
6	9/26	Action situations and the Ecology of Games (annotated bib #3	EC, KC, JAW
		due)	
7	10/3	Collaborative governance	ES
8	10/10	Survey research and other theories of behavior	SB
9	10/17	Fall break, no class	
10	10/24	Social and social-ecological networks	KC
		Paper outline due	
11	10/31	Simulation	JY
12	11/7	Indicators and other models	EC
13	11/14	Scalar and spatial influences	UJ, JAW
		Paper draft due	
14	11/21	Project work time, no class	
		Thanksgiving Break	
15	11/28	Writing workshop #1	
16	12/5	Writing workshop #2	
Finals	12/12	Paper due	

Tentative course schedule

All readings and assignments can be found on Canvas.

University policies

Accommodations

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

Academic honesty

Academic honesty is essential to the existence of an academic institution. The responsibility for maintaining that integrity is shared by all members of the academic community. The University's <u>Student Code of Conduct</u> addresses academic dishonesty. Students who commit acts of academic dishonesty are subject to disciplinary action and are granted due process and the right to appeal any decision. In this course, unintentional plagiarism is still considered plagiarism. It is essential that you properly cite your sources.

Academic Support Services

You can schedule free appointments for individual academic coaching with First-Year Experience and Transition Program staff through MyPLAN. You can also take advantage of study stops--which provide individual and group study with learning consultants in a variety of disciplines--and free group workshops on topics such as time management, goal setting, test preparation, and reading strategies. See <u>success.unl.edu</u> for schedules and more information.

Counseling and Psychological Services

UNL offers a variety of options to students to aid them in dealing with stress and adversity. <u>Counseling and Psychological & Services (CAPS)</u>; is a multidisciplinary team of psychologists and counselors that works collaboratively with Nebraska students to help them explore their feelings and thoughts and learn helpful ways to improve their mental, psychological and emotional well-being when issues arise. CAPS can be reached by calling 402-472-7450. <u>Big Red</u> <u>Resilience & Well-Being</u> (BRRWB) provides one-on-one well-being coaching to any student who wants to enhance their well-being. Trained well-being coaches help students create and be grateful for positive experiences, practice resilience and self-compassion, and find support as they need it. BRRWB can be reached by calling 402-472-8770.

Diversity and Inclusion

The University of Nebraska-Lincoln does not discriminate on the basis of race, ethnicity, color, national origin, sex (including pregnancy), religion, age, disability, sexual orientation, gender identity, genetic information, veteran status, marital status, and/or political affiliation.

Recording of class-related activity

I invite all of you to join me in actively creating and contributing to a positive, productive, and respectful classroom culture. Each student contributes to an environment that shapes the learning process. Any work and/or communication that you are privy to as a member of this course should be treated as the intellectual property of the speaker/creator, and is not to be shared outside the context of this course.

Students may not make or distribute screen captures, audio/video recordings of, or livestream, any class-related activity, including lectures and presentations, without express prior written consent from me or an approved accommodation from Services for Students with Disabilities. If you have (or think

you may have) a disability such that you need to record or tape class-related activities, you should contact Services for Students with Disabilities. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Failure to follow this policy on recording or distributing class-related activities may subject you to discipline under the Student Code of Conduct.

Instructional continuity

If in-person classes are canceled, you will be notified of the instructional continuity plan for this class via a Canvas announcement.

COVID-19 related policies

Attendance

Students who are sick or who are engaging in self-quarantine in accordance with guidance from the Lincoln-Lancaster County Health Department or their health care professional should not physically attend in-person classes. They must notify the instructor of their absence and must still meet the stated engagement expectations of the course, and they must adhere to the usual codes of conduct and rules of academic integrity that remain in place.

Required Use of Face Coverings for On-Campus Shared Learning Environments

As of August 25, 2021, in keeping with the directed health measure (DHM) issued on August 24, 2021 by the Lincoln-Lancaster County Health Department, all University of Nebraska–Lincoln (UNL) faculty, staff, students, and visitors (including contractors, service providers, and others) are required to use a facial covering at all times when indoors except under specific conditions outlined in the COVID 19 face covering policy found at: https://covid19.unl.edu/face-covering-policy. This policy is in effect until further guidance from the Office of the Chancellor. This statement is meant to clarify classroom policies for face coverings.

The classroom is a community, and as a community, we seek to maintain the health and safety of all members. Failure to comply with the campus Face Covering Policy is interpreted as a disruption of the classroom and may be a violation of UNL's Student Code of Conduct. Individuals who have health or medical reasons for not wearing face coverings should work with the Office of Services for Students with Disabilities (for students) or the Office of Faculty/Staff Disability Services (for faculty and staff) to establish accommodations to address the health concern. Students who prefer not to wear a face covering should work with their advisor to arrange a fully online course schedule that does not require their presence on campus.

Students in the classroom:

- 1. If a student is not properly complying with the policy, the instructor will remind the student of the policy and ask them to comply with it.
- 2. If the student will not comply with the face covering policy, the instructor will ask the student to leave the classroom, and the student may only return when they are complying with the policy.
- 3. If the student refuses to comply with the policy or leave the classroom, the instructor will dismiss the class and will report the student to Student Conduct & Community Standards for misconduct, where the student will be subject to disciplinary action.

Instructors in the classroom:

1. If an instructor is not complying with the policy, students will remind the instructor of the policy and ask them to comply with it.

2. If an instructor will not comply with the policy, students may leave the classroom and should report the misconduct to the department chair or via UNL Report for disciplinary action through faculty governance processes.

Flexibility with instruction methods

This course is designated as an "in person" course for Fall 2022. However, we recognize that the current situation is fluid, and we may need to adapt to changing conditions.

Revisions

2022-08-24: Fixed class start time and discussion rotation