Design of Natural Resource Studies
ENR 8375 – Fisheries and Wildlife Seminar (3 Credits)
Autumn 2021

Meeting Time: Tuesday 9:10–12:10; Kottman 333

Instructor: Dr. William Peterman,
375B Kottman Hall
Phone: 614-292-9795
E-mail: Peterman.73@osu.edu
Office Hours: Stop by whenever

Course Description
This will be a discussion-driven course revolving around primary literature and book chapters, as well as study design proposals and presentations prepared by each student. The course is meant to be practical in that students can use this opportunity to develop or flesh out the design of a study relevant to their graduate research. Emphasis will be placed on understanding different types of study designs, critical considerations when designing studies, and appropriate analytical approaches and inferential frameworks.

Course Objectives
The intent of this course is to teach beginning graduate students the principles of natural resource study design in the context of wildlife, conservation, ecological, behavioral, and evolutionary research. The ultimate goal is to effectively integrate the processes of developing research questions and hypotheses with the physical layout of field studies or experiments, and to understand the assumptions of inferential statistics.

Prerequisites
None

Grading & Attendance
There are a total of 100 points that can be earned in this course. Grades will be assigned based on participation in discussions (20 points), leading discussion of assigned literature (20 points), writing of a research design proposal (20 points), peer review of proposals (20 points), and presentation of a research design proposal (20 points). Student success in this course is tied to regular attendance. Your participation grade will be reduced 5% for each unexcused absence. Absences can be excused with communication and documentation related to the absence.

*Late assignments will be issued a 5% percent penalty for every 24 hours late, including weekends*
Communication/documentation of extenuating circumstances will remove this penalty

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<th>A 93–100%</th>
<th>B– 80–82</th>
<th>D+ 67–69</th>
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<td>Grade</td>
<td>A– 90–92</td>
<td>C+ 77–79</td>
<td>D 60–66</td>
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<td>B+ 87–89</td>
<td>C 73–76</td>
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<td>B 83–86</td>
<td>C– 70–72</td>
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Readings
All readings will be made available on Carmen, and will consist of articles from the primary literature and chapters from:


Personal Electronics
Please be respectful of others and restrict use of personal electronic devices (phones, tablets, etc.) to necessary classroom activities.

Take care of yourself
A recent American College Health Survey found stress, sleep problems, anxiety, depression, interpersonal concerns, death of a significant other, and alcohol use among the top ten health impediments to academic performance. Students experiencing personal problems or situational crises during the semester are encouraged to contact the OSU Counseling and Consultation Services (614-292-5766; [www.ccs.osu.edu](http://www.ccs.osu.edu)) for assistance, support, and advocacy. **This service is free and confidential**

Academic misconduct will not be tolerated in this course. The Ohio State University’s Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the University, or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University’s Code of Student Conduct is never considered an “excuse” for academic misconduct, so I recommend that you review the Code of Student Conduct ([http://studentaffairs.osu.edu/csc/](http://studentaffairs.osu.edu/csc/)) and, specifically, the sections dealing with academic misconduct. I am obligated by University Rules to report suspected academic misconduct in the course. Please see the Student Resource Guide if you have questions about this policy and as always please contact me if you have any questions.

Writing Assistance
Writing is a critical form of communication, and effective writing takes time, effort, and practice. The Center for the Study and Teaching of Writing ([http://cstw.osu.edu/writing-center](http://cstw.osu.edu/writing-center)) offers “offers free help with writing at any stage of the writing process for any member of the university community. During our sessions, consultants can work with you on anything from research papers to lab reports, from dissertations to résumés, from proposals to application materials.” Please take advantage of this resource to submit the best possible writing assignments in this course.

Special Needs: If you need an accommodation based on the impact of a disability, please contact me to discuss as soon as possible. We can discuss the course format, anticipate your needs and explore potential accommodations. I rely on the Office for Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, I encourage you to do so ([http://www.ods.ohio-state.edu](http://www.ods.ohio-state.edu), Phone: 614-292-3307)
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<tr>
<th>Week</th>
<th>Topic &amp; Reading(s)</th>
<th>Leader</th>
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<tr>
<td>5</td>
<td><strong>Survey Strategies</strong>&lt;br&gt;Morrison, M.L.et. al. 2008. <em>Wildlife study design</em>. Chapter 4</td>
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<td>8</td>
<td><strong>NO CLASS – Wildlife Society Meeting</strong></td>
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13 **Interpreting / Reporting Statistics**


**14 NO CLASS – Thanksgiving Break**

**15 Proposal Presentations**

**16 Proposal Presentations**

**Assignments**

**Research proposal (20 points)** – You will write a research proposal on a topic or project of interest. It should be of practical benefit for you and your research, regardless of where you are in your career. This is not intended to be a full-blown proposal. Much less time and effort will be spent on background, justification, and implications. These are obviously critical, but are not the focus of this exercise. Emphasis will be placed on clearly aligning your study design with your stated goals, objectives, and hypotheses, as well as proposed analyses.

- Initial draft due Week 12
- Final proposal due Week 16

**Peer Review (20 points)** – You will provide critical review of a peer’s research proposal. We will discuss the anatomy and expectations of a quality peer review, and your review will be evaluated in light of these.

- Reviews will be due Week 13

**Presentation (20 points)** – You will give a ~12 minute presentation, followed by a ~12 minute class discussion. Presentations need to detail the objectives, hypotheses, and analyses being proposed. Emphasis will be placed on developing meaningful visual displays of your study design and hypotheses.

- Presentations will occur during Weeks 15 & 16

**Presentation (20 points)** – Each week you are expected to be an active and engaged participant in the discussion of assigned readings.

**Communication** – I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call 614-688-HELP at any time if you have a technical problem.)

- **Grading and feedback**: For large weekly assignments, you can generally expect feedback within 7 days.
- **E-mail**: I will reply to e-mails within 24 hours on school days.