Design of Ecological Field Studies  
ENR 8890.01 – Fisheries and Wildlife Seminar (3 Credits)  
Autumn 2018

Meeting Time and Place: 8:30 – 11:30, Kottman Hall 385

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

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 ecological 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:  
This class assumes previous course work in General Statistics or Biometry. A course in ecology, behavior, or field biology is preferred.

Grading  
Grades will be assigned based on participation in discussions (20), leading of assigned literature (20), writing of a research design proposal (20), peer review of proposals (20), and presentation of research design proposals (20).

Readings  
The class readings will consist of articles from the primary literature and chapters from:

Morrison, M.L. Block, W.M., Strickland, M.D., Collier, B.A., Peterson, M.J.

Community Ecology (1986)  
edited by Ted Case and Jared Diamond (1986).
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) 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/) 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) 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, Phone: 614-292-3307)
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<thead>
<tr>
<th>Week</th>
<th>Topic &amp; Reading(s)</th>
<th>Leader</th>
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<tbody>
<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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Interpreting / Reporting Statistics


Assignments
7-Nov Draft research design proposals
14-Nov Peer reviews of research designs
28-Nov Presentation of research designs
5-Dec Presentation of research designs; Final Research design proposals