NR 791

INTRODUCTION TO RESEARCH FALL SEMESTER 2021, 1 CREDIT

Instructors: Michael Rader Daniel Isermann Brian Sloss

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Office: TNR 378 Office: TNR 163 Office: TNR 100E

Lectures: Fridays 9-9:50 in TNR 255

Objectives: 1) be able to write an appropriate research hypothesis; 2) demonstrate the ability to

write clearly and concisely in a style that is appropriate for your discipline, 3) be able to produce written and verbal evaluations & summaries of articles from the primary literature; 4) demonstrate the ability to apply principles of experimental design, and 5) understand the various roles of statistics in research, assumptions of parametric tests, differences among various categories of statistics, and the factors

that determine the choice of a statistical method.

Textbooks: "How to Do Ecology" by R. Karban and M. Huntzinger, 2006. Available as an

ebook at https://ebookcentral.proquest.com/lib/uwsp/detail.action?docID=1603119

Grading: Assignments will not be accepted if they are turned in after the due date, other than

for extenuating circumstances such as a family or health emergencies. Final grades for the course will be awarded using the following minimum values: A = 93%;

A-= 90%; B+=87%; B=83%; B-=80%; C+=77%; C=73%; C-=70%; D+=67%; D=60%; F=<60%. The final class grade will be based on the

following:

50 points In-class participation
100 points Pre-proposal assignment
100 points Abstract assignment
100 points Literature Review

100 points *Methods Assignment* 50 points *Paper Review Assignment*

Specific details for completing individual assignments will be provided in class.

Schedule

| <u>Date</u> | Topic with Required Readings and Assignment Due Dates | |
|-------------|--|-------------------------------|
| Sept 3 | Research Process (Sloss) | |
| Sept 10 | Research Process (Rader) | |
| Sept 17 | Research Compliance and Ethics (Sloss) | |
| Sept 24 | Framing a research proposal, writing objectives (Isermann) | |
| Oct 1 | Abstracts and executive summaries (Isermann) | |
| Oct 8 | Introduction and Literature Review (Isermann) | Pre-Proposal is Due |
| Oct 15 | Methods and Results (Rader) | Abstract Assignment is Due |
| Oct 22 | Discussion (Isermann) | |
| Oct 29 | Experimental Design in the Real World (Isermann) | Literature Review is Due |
| Nov 5 | Experimental Design in the Real World (Rader) | Methods Assignment Due |
| Nov 12 | Importance of Social Science in Natural Resource Management and Research (Rader) | |
| Nov19 | Publishing your Research (Rader) | |
| Dec 3 | Providing Useful Critiques and Reviews (Isermann) | |
| Dec 10 | Critical Review of Your Work and How to Respond (Rader) Paper Review Due | |