

**Statistical Applications in Wildlife Biology
Spring Semester 2022**

Instructor: Dr. Paul M. Lukacs
WILD 542
Credit/No Credit

Class meeting time: Thursday 12-2pm SG 303, Zoom <https://umontana.zoom.us/my/paul.lukacs>
Office Hours (FOR 307): By appointment (paul.lukacs@umontana.edu)

Statistical applications in Wildlife Biology will explore statistical problems encountered by wildlife biology and ecology graduate students. Students will bring statistical problems of interest to class where we will explore potential analysis options, assumptions, pitfalls and alternatives to solve the problem as a group. Goals of the course include effective solutions to student problems, building knowledge of statistical software such as R, improving understanding of likelihood and Bayesian estimation methods, and improving communication skills for quantitative methods.

Each student is expected to lead a discussion on a statistical problem of his or her choice. The student will present the problem as well as the biological question driving the statistical problem. The student should also provide the class with relevant reading(s) prior to the discussion. The class will then discuss the problem and work towards a solution. Students are also expected to attend class and participate in discussions.

Schedule

January 20 – Introduction

January 27 – Vlad Kovalenko

February 3 – Bridger Creel

February 10 – Lindsey Barnard

February 17 – Random Effects

February 24 – Elise Zaris

March 3 – No Class

March 10 – Sattie Fisher

March 17 – Connor Meyer

March 24 – Spring Break

March 31 – Ross Hinderer

April 7 – Sunny Domschot

April 14 –

April 21 –

April 28 –

May 5

Camera traps

Sample size

Random versus fixed effects, individuals, years, repeated measures