

Statistical Applications in Wildlife Biology Spring Semester 2019

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

Class meeting time: Tuesday 1-3pm FA 302

Office Hours (FOR 307): T 10-11, TH 9-10 or 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 14 – Introduction

January 21 – Bayesian Inference (Lukacs)

January 28 – Integrated Population Models (Lukacs)

February 4 – Integrated Population Models (Lukacs)

February 11 – Jess Krohner / Model fit (Lukacs)

February 18 – Alex Welander / Collin Peterson

February 25 – Pauline Mergel

March 3 – Andrew Lahr

March 10 – Brenna Cassidy

March 17 – Spring Break

March 24 – Anna Moeller

March 31 – Anthony Dangora

April 7 – Michelle Kissling

April 14 – Ross Hinderer

April 21 – Elise Zarri

April 28 – Tara Meyer