INFECTIOUS DISEASE MODELING IN HUMANS AND ANIMALS

- An introduction to applied infectious disease modeling suitable for advanced undergraduate students, graduate students, health professional students, and health professionals.

- Learn how the susceptible, infected, removed (SIR) model can represent infectious disease transmission.

- Learn how to code and run the SIR model in R (www.r-project.org)

- Use models to assess health associated with infectious disease in humans and animals and evaluate different disease control and prevention strategies.

- Explore case studies that focus on infectious diseases that affect humans, livestock, and wildlife in different global settings.

The Thursday class consists of one hour of lecture and/or group exercises followed by one hour of computer laboratory exercises. The Friday class consists of one hour of a group discussion of a peer-reviewed journal article.