



Mathematical Modeling

MAT 451

Fall 2020, MW 9:00 – 10:15

Instructor: Dr. Sharon Crook

Would you like to learn more about how to build a mathematical model?

Do you want to learn techniques for simulating models and analyzing results?

Are you interested in learning how to communicate clearly about what a model tells you?

This practical, project-based class is an introduction to creating and analyzing mathematical models, where we concentrate on models from the life and social sciences. We also will use computational methods to simulate many of the models discussed in class using tools that will be introduced during the course. The course will be organized around basic mathematical content, learning how to use software and tools for model analysis and simulation, development of student projects, guest lectures, and presentations and discussions motivated by relevant published articles.