

# MATHEMATICAL ECOLOGY

## MATH 591

This course explores different methods of modeling a variety of population interactions as well as the methods of analyzing these models.

The topics will include species *competition, predation, mutualism, extinction, persistence, and density dependence.*



Additionally, models involving interactions between *age classes, multiple patches, and harvesting* will be studied.

We will also cover topics dealing with *stability, bifurcations, and chaos.*

Prerequisites are Calculus or permission from the instructor. For questions or further information please email Dr. Chan at [dmchan@vcu.edu](mailto:dmchan@vcu.edu).