

NSC 801: Introduction to Computational Science Spring 2016

3 credits

Section 001: Tues/Thurs, 10:20-11:40 a.m., 1 Natural Resources Building

Prerequisite: One semester of introductory calculus

Faculty: Professors. Alex Dicksen and Mohsen Zayernouri, from MSU's new Department of Computational Mathematics, Science and Engineering

Note: This course is open to all MSU graduate students that meet the prerequisites, regardless of discipline!

The objective of this course is to teach you to write computer programs to manipulate and visualize data, to create numerical models that allow insight into physical, biological and social systems, and above all learn to use the computer as a tool for problem solving. This will be done using examples from a wide variety of subjects, and will use the Python programming language and a variety of standard libraries and tools. The skills that you learn in this class will be useful in your research and in other courses, and are also highly valued by employers!

This course is open to all MSU graduate students that have taken at least one semester of calculus, and no prior programming experience is assumed. Note that this is the first graduate course being offered by MSU's new Department of Computational Mathematics, Science, and Engineering (CMSE), and will be the first course required for a graduate certificate in computational modeling.

Please contact Professor Brian O'Shea (oshea@msu.edu) with any questions.