Many of the models used in modern quantitative research in economics do not have analytical (or closed-form) solutions. For this reason, the computer has become an indispensable tool for conducting research in economics. The purpose of this course is twofold: first, to introduce students to numerical methods for analyzing economic models; second, to illustrate how economists use these methods to study models in a variety of subdisciplines, with special emphasis on macroeconomics, labor economics, industrial organization, public finance, financial economics, and environmental economics. The course will also teach the basics of scientific programming so students need not have any prior experience with programming languages.

This is also a Graduate course in Economics: Econ 561b

**Prerequisites:**
Undergraduate: Intermediate microeconomics, intermediate macroeconomics, and econometrics.
Graduate students: First-year graduate courses in microeconomics, macroeconomics, and econometrics.

**Undergrad Course Category:** Methodology