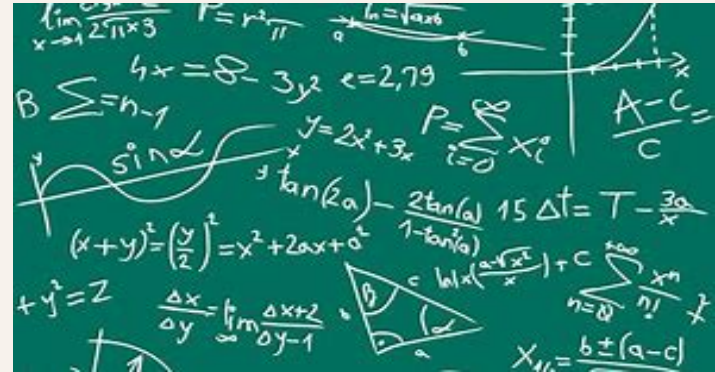


# Econ 5040

## Mathematics for Economists



This course is a survey of the mathematics necessary to study economics at the graduate level. The material emphasizes the prerequisite mathematics for graduate microeconomics, macroeconomics and econometric theory courses.

- The course covers linear algebra and the solution of linear economic and econometric models.
- The course covers single and multivariable calculus for the comparative static analysis of linear and general function economic models.
- The course emphasizes multivariable optimization theory with and without constraints.
- The course briefly introduces economic dynamics through the study of elementary differential and difference equations.
- All examples and problems presented in class come from material found in graduate level economics and econometrics courses.

### Who should take this course:

- Undergraduate students interested in perusing graduate study in economics are strongly recommended to take this course.
- Student in other social sciences such as history, political science or sociology that use quantitative models would find the course very useful.
- Business students in accounting, finance and marketing that are interested in quantitative models would greatly benefit from this course.

**\*\*Prerequisites for the course are Junior standing and 12 or more credit hours of economics, including ECON 2010, ECON 2020, and either (MATH 1220 or MATH 1700); or instructor approval.**

