

Mathematics (MATH)

Courses

MATH 529. Applied Regression Analysis. 4 Credits.

Techniques for fitting linear regression models are developed and applied to data. Topics include simple linear regression, multiple regression, curvilinear regression, and linearizable models.

P: Graduate status. REC: Introductory Statistics, Calculus I, and Linear Algebra. Knowledge of Excel and R.

Fall Only.

MATH 555. Applied Mathematical Optimization. 3 Credits.

Analytical and numerical optimization techniques; linear, nonlinear, integer, and dynamic programming. Techniques applied to problems of water, forest, air and solid-waste management.

P: gr st.

Fall Even.

MATH 630. Design of Experiments. 4 Credits.

Statistical theory and practice underlying the design of scientific experiments, and methods of analysis. Replication, randomization, error, linear models, least squares, crossed and nested models, blocking, factorial experiments, Latin squares, confounding, incomplete blocks, split-plots.

P: Graduate student status, Introductory Statistics course completion

Spring.

MATH 698. Independent Study. 1-3 Credits.

P: gr st.