Mathematics Courses

Courses

MATM 5360. Intro to Research in Math Ed.
An introduction to how to navigate, evaluate, and synthesize the research literature in mathematics education (or statistics education), formulate a compelling and feasible research question, and conduct a thorough literature review that can serve as the basis for a future educational research study.
3 Credit Hours
6 Total Contact Hours
0 Lab Hours
3 Lecture Hours
3 Other Hours

MATM 5361. Research Methods in Math Ed.
Continued critical engagement with the research literature in mathematics/statistics education with a focus on research methodology (especially techniques appropriate for classroom research) that is aligned with the research question. Course includes design issues, finding or developing instruments, reliability, validity, triangulation, navigating the Institutional Review Board process, and collecting data from sources such as interviews, observations, surveys, tests, and artifacts.
3 Credit Hours
6 Total Contact Hours
0 Lab Hours
3 Lecture Hours
3 Other Hours

Prerequisite(s): (MATM 5360 w/C or better AND MATM 5364 w/C or better)

MATM 5364. Quant. Research in Math Ed.
An introduction to the fundamentals of descriptive and inferential statistics including: sampling, regression, multiple regression, chi-square, analysis of variance, psychometrics, and the appropriate use of technology. Additional topics are selected from: analysis of covariance, logistic regression, factor analysis, and nonparametric statistics. Emphasis is on practical usage and the conceptual understanding of data analysis and experimental designs that are commonly used in the research literature for the specific context of mathematics education or statistics education.
3 Credit Hours
6 Total Contact Hours
0 Lab Hours
3 Lecture Hours
3 Other Hours

Major Restrictions:
Restricted to majors of MATM

MATM 5365. Tech in the Math Classroom.
An introduction to technology used in mathematics education such as graphing calculators, computer algebra systems, course specific software and the use of the internet, and an exploration of its appropriate and effective use in the mathematics classroom.
3 Credit Hours
6 Total Contact Hours
0 Lab Hours
3 Lecture Hours
3 Other Hours

Major Restrictions:
Restricted to majors of MATM