## MATH, GRADUATE (MG)

## MG 5340 Middle/Secondary Pedagogy for Geometry (4)

This course focuses on Euclidean geometry concepts central to the Common Core State Standards in Mathematics [CCSSM]. The mathematical content of the course aligns with the CCSSM standards (gr. 5-12) in geometry. Students will develop conceptual understanding of geometric properties and relationships, applying and analyzing concepts, procedures, and proofs. Activities are designed to demonstrate how the Standards for Mathematical Practice in CCSSM can be integrated in the everyday learning experiences of every student. Class discussions are centered on thinking processes, habits of mind, conceptual understanding, and dispositions that students need in order to develop a deep, flexible, and enduring understanding of mathematics.

## MG 5350 Middle/Secondary Pedagogy for Statistics and Probability (4)

This course focuses on statistics and probability concepts central to the Common Core State Standards in Mathematics [CCSSM]. The mathematical content of the course aligns with the CCSSM standards (gr. 5-12) in statistics and probability. Students will develop conceptual understanding and fluency in statistical concepts, data analysis, and probability. Activities are designed to demonstrate how the Standards for Mathematical Practice in CCSSM can be integrated in the everyday learning experiences of every student. Class discussions are centered on thinking processes, habits of mind, conceptual understanding, and dispositions that students need in order to develop a deep, flexible, and enduring understanding of mathematics.

## MG 5910 Independent Study (1-4)

An individual study project determined to be of value to students and the Mathematics Department. Students present a talk concerning some portion of their study to a department colloquium during the term. Consent of a faculty supervisor and department chair is required.