

Department of Teaching and Learning
GEMTHPMA - Teachers of Mathematics 7-12: Professional Certification (M.A.)
Program of Study
2022-2023

Total Units Required		30
Content Core Mathematical Courses <i>by advisement, approval required</i>		8-9
Course Number	Course Title	Units
MTHED-GE.2050	Mathematical Proof and Proving (required)	2
MTHED-GE.2043	Selected Topics in Modern Mathematics I: Number Theory	3
MTHED-GE.2044	Selected Topics in Modern Mathematics II: Discrete Mathematics	3
MTHED-GE.2103	Mathematical Modeling	3
MTHED-GE.2104	Mathematical Investigation and Problem Posing	2
MATH-GA.xxxx	by advisement	4
Pedagogical Content Knowledge Courses <i>by advisement, approval required</i>		12-13
Course Number	Course Title	Units
MTHED-GE.2033	The Teaching of Secondary School Mathematics (required)	3
MTHED-GE.2031	The Teaching of Rational Numbers, Grades 5-12 (required)	2
MTHED-GE.2035	The Teaching of Algebra, Grades 7-12 (required)	2
MTHED-GE.2036	The Teaching of Geometry, Grades 7-12 (required)	2
MTHED-GE.2034	Educational Technology in Secondary School Mathematics (required)	2
MTHED-GE.2032	The Teaching of Data Collection and Analysis, Grades 7-12	2
MTHED-GE.2037	Teaching Pre-Calculus and Trigonometry in High School	2
MTHED-GE.2080	Teaching of Computer Science Education	2
MTHED-GE.2110	Introduction to Computer Science Education	3
MTHED-GE.2007	Curriculum and Assessment in Secondary Mathematics	2
MTHED-GE.2300	Independent Study	1-3
Current Issues in Education		9
Course Number	Course Title	Units
MTHED-GE.2008	Research Investigations in Mathematics Education (required)	3
MTHED-GE.2061	History of Mathematics	3
MTHED-GE.2110	Introduction to Computer Science	3
SCMTH-GE.2000	Contemporary Issues in Science and Math Ed: Gender and Ethnicity	3
SPCED-GE.2124	Individuals with Disabilities in Schools and Communities	3
SPCED-GE.2162	Educating Students w Disabilities in Middle Childhood & Adolescent Settings	3
EDCT-GE.2251	Educational Design for the WWW	3
TCHL-GE.2013	Applied Research Design	3
APSY-GE.2345	Academic Achievement Gaps	3
HSED-GE.2177	What Are Teachers For? Historical Perspective	3
HSED-GE.2400	Foundations of Education: History of Education	3

Culminating Project

Students must complete a paper on some current issue relating to adolescent mathematics education. The topic of this paper will be negotiated with the project advisor.