

Department of Teaching and Learning
Mathematics Education: Teachers of Mathematics 7-12: Professional Certification (MTHP-MA)
Program of Study
2020-2021

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|---|---|--------------|
| 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 | | 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 |
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| 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 |
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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.

Curriculum updated October 2017

File saved January 2020