A student selecting this option will only be certified to teach mathematics at the middle level grades 4-8.

PDE Competency Areas

I. Content Knowledge: 81 credits including General Education Requirements which are indicated by an *

A total of 33 credits are counted in a dual capacity

Concentration Area

A. Math: 30 credits required
   ___ MAT 110 Funds Math I (3)*
   ___ MAT 111 Funds Math II (3)*
   ___ MAT 211 Calculus I (4)
   ___ MAT 225 Discrete Mathematics (4)
   ___ MAT 313 Applied Statistics (4)
   ___ MAT 326 Mathematical Modeling (3)
   ___ MAT 329 Elementary Linear Algebra (3)
   ___ MAT 333 Euclidean and Non-Euclidean Geometry (3)
   ___ MAT 400 History of Mathematics (3)

Cognate Areas

B. Language Arts: 12 credits required
   ___ ENG 106 Writing Intensive Seminar (3)* or
     ENG 101 College Writing (3)* or
     ENG 110 Advanced Placement Writing (3)
   ___ HCS 100 Intro Human Communication* (3)
   ___ RDG 232 Reading in the Elementary School (3)
   ___ RDG 340 Seminar in Literacy Tutoring (3)

C. Science: 12 credits required
   ___ BIO 100 Basic Biology (3)*
   ___ CHM 105 An Observational Approach (3)*
   ___ PHY 121 Physics I (3)
   ___ ESS 110 Introduction to Geology (3)*

D. Social Studies: 12 credits required
   ___ GEO 101 World Geography (3)*
   ___ ECN 101 Macroeconomics (3)* or
     PLS 100 U.S. Government and Politics (3)*
   ___ HIS 105 World History I (3)*
   ___ HIS 106 World History II (3)*

Additional Coursework

E. Literature – 3 credits
   ___ ENG 243 Art of the Film (3)* or
     ENG 248 Intro to Culturally Diverse Lit (3)* or
     ENG 250 Intro to Literature (3)*

Note on Prerequisites

Discrete Math: Students must meet one of the following prerequisites: MAT 120 or college level high placement on the placement test. However, this prerequisite is currently being waived for any student who scores higher than 515 on the math part of the SAT.

Calculus I: Students must meet one of the following prerequisites: a grade of C or better in MAT 175 or advanced level placement on the placement test. However, this prerequisite is currently being waived for any student who scores higher than 605 on the math part of the SAT.

F. Fine Arts – 6 credits
   (Select two from different disciplines)
   ___ MUS 110 Fundamental Music Skill (3)* or
     MUS 121 Introduction to Music (3)* or
     MUS 261 World Music (3)*
   ___ Art (ART 101 is recommended)
     ___ ART 101 Art Appreciation (3)* or
     ___ ART 231 Art History I (3)* or
     ___ ART 232 Art History II (3)* or
     ___ ART 274 Intro to Cultural Studio (3)* or
     ___ ART 339 History of American Art (3)*
    Theatre ___ THE 121 Intro to Theatre (3)*

G. Social and Behavioral Sciences- 6 credits
   ___ PSY 101 General Psychology (3)*
   Choose one of the following
     ___ ANT 111 Cultural Anthropology (3)* or
     ___ GEO 140 Cultural Geography (3)* or
     ___ SOC 101 Intro. to Soc: Society & Div (3)*

II. Professional Core & Student Teaching: 42 credits

A. Middle Level Cognitive Development
   ___ TCH 206 Social Found of Middle Level Educ (3)

B. Early Adolescent and Adolescent Learning Theory
   ___ TCH 261 Adolescent Dev and Lng Theory (3)

C. Assessments and Interventions
   ___ EEC 480 Assessing Children with Exceptionalities for Curricular Decision Making (3)

D. Adaptations and Accommodations for Diverse Learners and English Language Learners
   ___ EEC 273 Introduction to Exceptionalities: Understanding Diverse Learners (3)
   ___ EEC 413 Effective Instructional Strategies for Students with Exceptionalities (3)
   ___ EEC 447 Instructional Content and Practices for Special Education (3)

E. Middle Level Teaching Methods
   ___ TCH 342 Teaching Middle Level Mathematics (3)
   ___ TCH 251 Elements of Middle Level Instruction (3)

F. English Language Learners (ELL)
   ___ RDG 413 Teaching Reading to English (3)

G. Student Teaching
   ___ Student Teaching Experience (15)