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

PDE Competency Areas

I. Content Knowledge: 84 credits including General Education Requirements which are indicated by an *. A total of 33 credits are counted in a dual capacity.

II. Concentration Area

A. Science: 31 credits required
   - BIO 161 Principles of Biology: Cell Structure (4)*
   - BIO 162 Principles of Biology: Organismal Diversity (4)
   - BIO 208 Field Biology (3) or BIO 242 Ecology (3)
   - CHM 105 An Observational Approach (3)*
   - CHM 121 Chemical Bonding (3) and
   - CHM 125 Chemical Bonding Lab (1) or
   - PHY 122 Intro to Physics II (3) and
   - PHY 125 Intro to Physics II Lab (1)
   - PHY 121 Physics I (3) and
   - PHY 123 Physics I Lab (1)
   - ESS 110 Introduction to Geology (3)*
   - ESS 111 Intro to Atmosphere (3)
   - ESS 210 Physical Geography (3) or
   - ESS 220 Oceanography (3) or
   - ESS 325 Meteorology (3) or
   - ESS 404 Applied Meteorology and Climatology (3)

Cognate Areas

B. Social Studies: 12 credits required
   - GEO 101 World Geography (3)*
   - ECO 101 Macroeconomics (3)* or
   - PLS 100 U.S. Government and Politics (3)*
   - HIS 105 Historical Foundation of Global Cultures (3)*
   - HIS 106 Thinking Historically in a Global Age (3)*

C. Math: 13 credits required
   - MAT 205 Survey of Middle Grades Mathematics (3)
   - MAT 175 Precalculus (3) (See note on Prerequisites)
   - MAT 105 Math For Liberal Arts (3)
   - MAT 117 Applied Statistics (4)

D. Language Arts: 12 credits required
   - ENG 114 Writing Intensive Seminar (3)* or
   - ENG 110 Advanced Placement Writing (3)*
   - HCS 100 Intro to Human Communication (3)*
   - RDG 222 Reading in the Elementary School (3)
   - RDG 329 Reading in the Content Area (3) (Prerequisite RDG 232)

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)*

F. Fine Arts: 6 credits
   (Select two from different disciplines)
   - MUS 110 Fundamental Music Skills (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)*

III. Professional Core & Student Teaching: 39 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 483 Assessing Children with Exceptionalities for Curricular Decision Making (3)
   - TCH 345 Assessment & Evaluation (3)
D. Adaptations and Accommodations for Diverse Learners
   - EEC 273 Introduction to Exceptionalities: Understanding Diverse Learners (3)
   - EEC 423 Effective Instructional Strategies for Students with Exceptionalities (3)
E. Middle Level Teaching Methods
   - TCH 366 Teaching Science at the Middle Level (3)
   - TCH 251 Elements of Middle Level Instruction (3)
F. English Language Learners (ELL)
   - RDG 413 Teach Read to English Lang Learners (3)
G. Student Teaching
   - EDU 495 Student Teaching Experience (12)
### Major (Professional Education) Requirements

**Note on Prerequisites**

- **Precalculus**: MAT140A, MAT140B, math placement level 5, or permission of department chair.

- **Discrete Math**: Students must meet one of the following prerequisites: MAT140A or math placement level 4 or above.

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**This planning sheet is for Freshman entered Fall 2017 or later**

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Students electing certain minors can be required to complete more credits to complete both the elementary program and the requirements of the selected minor. **ALL** students are required to complete at least 120 credit hours for graduation. The **final responsibility** for scheduling and fulfilling program requirements **belongs to the student**. Majors failing to maintain the department required QPA of 3.0 will not be permitted to schedule Teacher Education courses until they have reached the required QPA.