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 115 Principles of Biology I (4)*
   ___ BIO 116 Principles of Biology II (4)
   ___ BIO 208 Field Biology (3)
   ___ BIO 242 Ecology (3)
   ___ CHM 105 An Observational Approach (3)*
   ___ CHEM 121 Chemical Bonding (3)
   ___ CHEM 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)
   ___ PHY 123 Physics I Lab (1)
   ___ ESS 110 Introduction to Geology (3)*
   ___ ESS 111 Intro to Atmosphere (3)
   ___ ESS 220 Oceanography (3) or
   ESS 212 Historical Geology or
   ESS 306 Geomorphology or
   ESS 404 Applied Meteorology and Climatology (3)

Cognate Areas

B. 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)*

C. Math: 14 credits required
   ___ MAT 110 Funds Math I (3)*
   ___ MAT 111 Funds Math II (3)*
   ___ MAT 211 Calculus I (4)
   ___ MAT 225 Discrete Mathematics (4)

D. 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)

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)
   Music
   ___ 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: 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 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 366 Teaching Science at the Middle Level (3)
   ___ TCH 251 Elements of Middle Level Instruction (3)

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

F. Student Teaching
   ___ Student Teaching Experience (12)
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 elementary courses until they have reached the required QPA.

2/29/08