PHYSICS-B.S.Ed.

General Education Requirements
I. Required Skills and Competencies 15 cr
___ ENG 106 Writing Intensive First Year Seminar OR
___ ENG 110 Advanced Placement Writing (3 cr)
May need ENG 100 Basic Writing first, based on test results.
___ HCS 100 Intro to Human Communication (3 cr)
___ Mathematical Competency-Required
MAT 211 Calculus I — if necessary, student may need to take
MAT 175 Pre-Calculus first
___ HIS 105 Historical Foundations of Global Cultures (3 cr) AND
___ HIS 106 Thinking Historically in a Global Age (3 cr)
II. Categories of Knowledge 35 cr
A: Logic/Numbers for Rational Thinking (4 cr)
___ MAT 212 Calculus II
B: Literary, Artistic & Cultural Traditions (9 cr)
___ ______________________________
___ ______________________________
___ ______________________________
C: Biological & Physical Sciences (10 cr)
___ CHM121 Chemical Bonding
___ ESS 110 Intro to Geology OR
ESS 210 Physical Geology
___ BIO 162 Principles of Biology: Organismal Diversity
D: Political, Economic & Geographic Science (6 cr)
___ ______________________________
___ ______________________________
E: Social & Behavioral Science (6 cr)
___ ______________________________
___ ______________________________
III. Library Skills Completed as part of the College Writing or Advanced Writing
course
Physics Core Requirements 30 cr
___ PHY 107 Freshman Seminar Physics I (2 cr)
___ PHY 221 Fundamentals of Physics I (5 cr)
___ PHY 222 Fundamentals of Physics II (5 cr)
___ PHY 301 Math and Numerical Techniques (4 cr)
___ PHY 311 Quantum I (4 cr)
___ PHY 321 Electricity and Magnetism I (4 cr)
___ PHY 331 Mechanics I (4 cr)
___ PHY 341 Classical and Statistical Thermo (4 cr)
Physics Requirements 6 cr
___ PHY 3xx Physics Elective 300 level or higher (3 cr)
___ PHY 4xx Physics Elective (3 cr)
Mathematics Requirements 19 cr
___ MAT 211 Calculus I (4 cr)*
___ MAT 212 Calculus II (4 cr)*
___ MAT 213 Calculus III (4 cr)
___ MAT 322 Differential Equations (3 cr)
___ CSC 110 Computer Science I (3 cr)
___ CSC 106 Computer Science I (1 cr)
Chemistry Requirements 10 cr
___ CHM 121 Chemical Bonding (3 cr) *
___ CHM 125 Lab IB (1 cr)
___ CHM 122 Chemical Dynamics (3 cr)
___ CHM 126 Lab II B (3 cr)
Professional Education Requirements 30 cr
___ TCH 207 Org. & Psych. Foundations of Secondary Education (3 cr)
The following must be taken together:
___ EDU 340 Teaching Science In Secondary School (3 cr)
EDU 341 Curriculum & Evaluation/Secondary Science Classroom I (3 cr)
EDU 495 Student Teaching & Professional Practicum (12 cr)
EEC 273 Introduction to Exceptionalities: Understanding Diverse Learners (3 cr)
EEC 423 Effective Instructional Strategies for Children w/ Exceptionalities PK-8 (3 cr)
EEC 483 Assessing Children with Exceptionalities for Curricular Decision Making (3 cr)
*Major requirement fulfills General Education Credits
Total Graduation Requirements 134 cr

GPA Needed to Declare: 3.0
Recommended Sequence of Courses:
Semester I MAT 211 Calculus I
PHY 107 Physics First Year Seminar*
Three Gen Ed Courses
*Students are recommended to complete 1 semester of calculus before starting
the intermediate physics sequence.
Chemistry should be taken in the junior year exceptional students
may take it earlier.