

University of Missouri – St. Louis, College of Education
B.S. Ed. in Secondary Education – Emphasis in Chemistry
General Education and Professional Education Requirements

NAME: _____ STUDENT NUMBER: _____

General Education Requirements (42 credits)

First Year Writing (3) _____ ENG 1100 (3) OR HIST 1111 (4)	Communication Proficiency (3) _____ EDUC 2222 OR COMM 1040	Mathematics Proficiency (3) _____ MATH 1030 OR MATH 1045	Information Literacy (3) _____ ED TECH 2230	U.S. History and Government (3) _____ HIST 1001 OR HIST 1002
Humanities (9) _____ Humanities Elective _____ Humanities Elective _____ Humanities Elective		Social Sciences (9) _____ ED PSY 2212 _____ Social Science _____ Social Science		Math and Sciences (9) 9 credit hours covered in Content Area Requirements

University Requirement – Junior Level Writing (3 credits)

_____ ENGL 3100 Junior-Level Writing (*ENG 1100) OR ENGL 3160 Writing in the Sciences (*ENG 1100) <i>(recommended)</i>
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Professional Education Requirements (39 credits)

Introduction to Education: EDUC 1000 Building Community, Culture & Learning in Education <i>OR</i> alternative freshman experience course EDUC 1001 Early Clinical Experience: Community Agency <i>OR SEC ED/BIO/CHEM/PHYS/CS/MATH 2010</i> Intro to STEM Ed (Step 1)	Credits:
1 _____ 1 _____	
Level I – Exploring Education as a Profession: TCH ED 2000 Becoming a Professional Educator TCH ED 2001 Early Clinical Experience: Schools <i>OR SEC ED/BIO/CHEM/PHYS/CS/MATH 2011</i> Intro to STEM Ed (Step 2) TCH ED 2209 Foundations of Teaching in American Schools	1 _____ 1 _____ 2 _____
Apply to Teacher Education Program (TEP) at http://coe.umsu.edu/portal/ and complete the following: _____ 2.75 Cumulative GPA _____ Missouri Educator Profile (MEP) _____ Intro Ed Courses _____ 3.0 Content Area GPA _____ TB Test and Background Check _____ Level 1 Courses _____ 3.0 Professional Education GPA _____ Pass MoGEA (MO General Education Assessment) _____ COE Gen Eds.	
Level II – Analyzing the Nature and Process of Education: ED PSY 3312 Psychology of Learning, Instruction, and Assessment SPEC ED 3318 Inclusive Classrooms TCH ED 3001 Mid-Level Clinical Experience: Diverse Learners TCH ED 3310 Introduction to Methods of Teaching TCH ED 4391 Literacy for Adolescent Learners in the Content Areas SEC ED 4880 Writing for Teachers <i>OR ENGL 3160 (above)</i>	3 _____ 3 _____ 1 _____ 2 _____ 3 _____ 3 _____
Level III – Synthesizing Theory and Practice in Education: SEC ED 4985 Curriculum and Methods of Teaching Life Sciences SEC ED 4989 Practicum I: Site-Based Experience SEC ED 4990 Practicum II: Site-Based Experience	3 _____ 3 _____ 12 _____
Total Professional Education Credit Hours	39

Content Coursework: Emphasis in Chemistry 9-12 or Unified Science-Chemistry Option

1) Chemistry Core Courses, (*) = prereqs	Credits (21-22):
CHEM 1111 Introductory Chemistry I (*MATH 1030 & 1035)	5 _____
CHEM 1121 Introductory Chemistry II (*CHEM 1111)	5 _____
CHEM 2223 Quantitative Analysis (*CHEM 1121) (required for Unified option)	3 _____
OR CHEM 2622 Organic Chemistry II (*CHEM 2612) (required for Unified option)	3 _____
OR CHEM 2633 Organic Chemistry Lab (*CHEM 2612) (required for Unified option)	3 _____
CHEM 2612 Organic Chemistry I (*CHEM 1121)	3 _____
CHEM 3302 Physical Chem for the Life Sci (*CHEM 2612, MATH 1100 or 1800, and PHYSCS 1012**) OR CHEM 3312 Physical Chemistry I	2 _____ 3 _____
CHEM 4712 Biochemistry (*CHEM 2612 and either BIOL 1831 or CHEM 2622)	3 _____
<i>**Note: PHYSCS 1012 can be waived with department approval.</i>	(27 Cr./Unified)
2) Associated Science and Math Area	Credits (25-29):
BIOL 1821 Introductory Biology I: Organisms and the Environment (required for Unified option) OR CHEM 1011 Environmental Chemistry OR BIOL 1202 Environmental Biology	5 _____ 3 _____ 3 _____
BIOL 1831 Introductory Biology II: From Molecules to Organisms (*MATH 1030)	5 _____
GEOL 1001 OR 1001A General Geology (Lab Optional)	3-4 _____
PHYSCS 1011 Basic Physics I (required for Unified option) (*MATH 1030 and 1035; MATH 1100 or MATH 1800 strongly recommended) OR PHYSCS 2111 Mechanics and Heat (Requires additional math: *MATH 1900)	4 _____ 5 _____
PHIL 3380 Philosophy of Science	3 _____
MATH 1035 Trigonometry (*MATH 1030 or MATH 1040)	2 _____
MATH 1800 Analytic Geometry and Calculus I (*MATH 1030 or MATH 1040, and MATH 1035)	5 _____
Total Content Area Coursework for Chemistry (9-12) Certification	46-51
Total Content Area Coursework for Unified Option	54-55

Optional: Unified Science – Chemistry

This option allows for certification in Chemistry (9-12) plus Intro Biology & Physics.

3) Additional Unified Coursework	Credits (12-14):
ATM SCI 1001 OR 1001A Elementary Meteorology (Lab Optional)	3 _____
PHYSCS 1012 Basic Physics II (*PHYSCS 1011) OR PHYSCS 2112 Electricity, Magnetism, and Optics (*MATH 2000)	4 _____ 5 _____
CHEM 1011 Environmental Chemistry	3 _____
CHEM 4733 Biochemistry Laboratory (*CHEM 4712 concurrent, and CHEM 2223)	2 _____
Total Content Area Coursework for Unified Science – Chemistry Certification	66–68

Total Credit Hours Required for Degree Completion (BSED Sec Ed Chemistry) 121-126

Total Credit Hours Required for Degree Completion (Unified Science & Chemistry) 141-143

Students must pass the relevant Content Assessment to receive the B.S.Ed. degree

MO Content Assessment ** (mo.nesinc.com) _____ Date taken _____

1) Test # _____ Passing Score _____ 2) Test # _____ Passing Score _____

I acknowledge that my advisor and I completely and thoroughly reviewed the information contained herein and I understand all of the degree requirements specified for this degree program.

I understand that any course approved by my advisor for transfer credit to be applied toward the teacher certification program is subject to approval by the Department of Elementary and Secondary Education. I also understand that if DESE does not approve any transfer course associated with teacher certification, an appropriate course substitution will be necessary in order to satisfy the competency requirement.

Student signature _____ **Date** _____

Advisor signature _____ **Date** _____

Comments _____

Phone: _____ Best time to call: _____

Email: _____

8/2017