BSEd in Secondary Education with Emphasis in Chemistry

Degree Program Description
The Bachelor of Science in Education in Secondary Education prepares students to work with children from ninth through twelfth grade in public, private, and alternative school systems. You may consider a degree in education if you enjoy working with children and/or adolescents, want to strengthen the future through education, and want to make a difference in the lives of others. MU Students work closely with mentors, practicing teachers, administrators, and university faculty to develop the knowledge and skills to enhance learning outcomes for children and youth. The coursework through the College of Education & Human Development focuses on teachers' roles in facilitating learning at all levels of development and considers the influences of cultural, political, historical, and economic factors on students, teachers, and schools. Upon successfully completing the initial teacher certification process, the state grants you certification in secondary chemistry. Practical and rewarding clinical training in schools and agencies begins sophomore year and continues each semester culminating in a senior-level teaching internship, enhancing teaching skills and confidence. Coursework within Secondary Chemistry provides you with experience in the methods of teaching chemistry and supporting learners in the development of scientific literacy. This includes consideration of the nature of science, methods for teaching science, strategies for assessing science learning, scientific literacy. This includes consideration of the nature of science, methods for teaching science, strategies for assessing science learning, and pathways for developing into a professional chemistry educator.

Major Program Requirements
Students must complete all university (http://catalog.missouri.edu/academicdegerequirements/universityrequirements/), general education (http://catalog.missouri.edu/academicdegerequirements/ generatedegerequirements/), and content requirements, in addition to degree requirements. Please meet with an Academic Advisor to discuss degree requirements and to create a semester plan.

Teacher Education programs in the College of Education & Human Development are accredited by the Missouri Department of Elementary and Secondary Education (DESE (https://dese.mo.gov/). Curriculum changes mandated to earn teacher certification may become effective at any point during your academic program. Therefore, it is extremely important that you DO NOT SELF ADVISE.

Cultural Diversity Requirement-Choose one of the following, or a course from the Multicultural Certificate Course List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>LTC 1100</td>
<td>Orientation</td>
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Early Experiences

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<tbody>
<tr>
<td>LTC 1100</td>
<td>Orientation</td>
</tr>
<tr>
<td>ESC_PS 2000</td>
<td>Experiencing Cultural Diversity in the United States</td>
</tr>
<tr>
<td>or H_D_FS 2300</td>
<td>Multicultural Study of Children and Families</td>
</tr>
<tr>
<td>or Multicultural Certificate Course (<a href="https://multicultural.missouri.edu/application/course-list/">https://multicultural.missouri.edu/application/course-list/</a>)</td>
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or SPC_ED 1100 Orientation: Special Education

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>LTC 2200</td>
<td>School Health and Student Wellbeing</td>
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<tr>
<td>ESC_PS 2010</td>
<td>Inquiry Into Learning I</td>
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<tr>
<td>ESC_PS 2014</td>
<td>Inquiry into Learning I - Field Experience</td>
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<tr>
<td>or ESC_PS 2014H</td>
<td>Inquiry into Learning I - Field Experience - Honors</td>
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<tr>
<td>LTC 2040</td>
<td>Inquiring into Schools, Community and Society I</td>
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<tr>
<td>or LTC 2040H</td>
<td>Inquiring into Schools, Community and Society I - Honors</td>
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<tr>
<td>LTC 2044</td>
<td>Inquiry into Schools, Community and Society: Field</td>
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<tr>
<td>IS_LT 2467</td>
<td>Inquiry into Empowering Learners with Technology</td>
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Mid-Level Experiences

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<tr>
<td>LTC 4634</td>
<td>Teaching Middle and Secondary Science Field</td>
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<tr>
<td>LTC 4560</td>
<td>Reading and Writing in the Content Areas</td>
</tr>
<tr>
<td>LTC 4460</td>
<td>Teaching English to Speakers of Other Languages</td>
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<tr>
<td>or LTC 4460H</td>
<td>Teaching English to Speakers of Other Languages - Honors</td>
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<tr>
<td>LTC 4641</td>
<td>Teaching Middle and Secondary Science II</td>
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<tr>
<td>LTC 4644</td>
<td>Teaching Middle and Secondary Science II Field</td>
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<tr>
<td>SPC_ED 4020</td>
<td>Teaching the Exceptional Learner</td>
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<tr>
<td>LTC 4565</td>
<td>Reading and Writing in the Content Areas II</td>
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Advanced-Level Experiences

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<tr>
<td>LTC 4654</td>
<td>Teach.Sci MS/Sec Sch: Phil,Hist,Sci Inq,Curr,Assm &amp; Tech III Fld</td>
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<tr>
<td>ED_LPA 4060</td>
<td>Inquiring into Schools, Community and Society II</td>
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<tr>
<td>SPC_ED 4310</td>
<td>Behavioral and Classroom Management</td>
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<tr>
<td>LTC 4971</td>
<td>Internship and Capstone Seminar</td>
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<tr>
<td>LTC 4971H</td>
<td>Internship and Capstone Seminar - Honors</td>
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Content Area

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<tr>
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<tr>
<td>CHEM 1320</td>
<td>College Chemistry I</td>
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<tr>
<td>CHEM 1320H</td>
<td>College Chemistry I - Honors</td>
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<tr>
<td>CHEM 1330</td>
<td>College Chemistry II</td>
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<tr>
<td>CHEM 1330H</td>
<td>College Chemistry II - Honors</td>
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<tr>
<td>CHEM 2100</td>
<td>Organic Chemistry I</td>
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<tr>
<td>CHEM 2110</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM 2130</td>
<td>Organic Laboratory I</td>
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<tr>
<td>CHEM 2130H</td>
<td>Organic Laboratory I - Honors</td>
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<tr>
<td>CHEM 3200</td>
<td>Quantitative Methods of Analysis with Lab</td>
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<td>CHEM 4310</td>
<td>Physical Chemistry I</td>
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<tr>
<td>BIOCHM 3630</td>
<td>General Biochemistry</td>
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BSEd in Secondary Education with Emphasis in Chemistry

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<tr>
<td>BIO_SC 1500</td>
<td>Introduction to Biological Systems with Laboratory (Recommended)</td>
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<td>Introduction to Biological Systems with Laboratory Honors</td>
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<td>or BIO_SC 1010 &amp; BIO_SC 1020</td>
<td>General Principles and Concepts of Biology and General Biology Laboratory</td>
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<td>General Principles and Concepts of Biology with Laboratory (Transfer Only)</td>
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<td>PHYSCS 1210</td>
<td>College Physics I</td>
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<td>GEOL 1200</td>
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<td>or GEOL 1100</td>
<td>Introduction to the Earth with Laboratory</td>
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**Semester Plan**

Below is a sample plan of study, semester by semester. A student’s actual plan may vary based on course choices and where options are available.

<table>
<thead>
<tr>
<th>Semester</th>
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<th>Spring</th>
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**Fourth Year**

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Total Credits: 125-126