### University Core and Graduation Requirements

#### University Core Requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>#Classes</th>
<th>Hours</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion Cornerstones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachings and Doctrine of The Book of Mormon</td>
<td>1</td>
<td>2.0</td>
<td>REL A 275</td>
</tr>
<tr>
<td>Jesus Christ and the Everlasting Gospel</td>
<td>1</td>
<td>2.0</td>
<td>REL A 250</td>
</tr>
<tr>
<td>Foundations of the Restoration</td>
<td>1</td>
<td>2.0</td>
<td>REL C 225</td>
</tr>
<tr>
<td>The Eternal Family</td>
<td>1</td>
<td>2.0</td>
<td>REL C 200</td>
</tr>
<tr>
<td>The Individual and Society</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Heritage</td>
<td>1-2</td>
<td>3-6.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Global and Cultural Awareness</td>
<td>1</td>
<td>3.0</td>
<td>SC ED 353*</td>
</tr>
<tr>
<td>Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Year Writing</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Advanced Written and Oral Communications</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>0-1</td>
<td>0-3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Languages of Learning (Math or Language)</td>
<td>1-4</td>
<td>3-20.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Arts, Letters, and Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilization 1</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Civilization 2</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Arts</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Letters</td>
<td>1</td>
<td>3.0</td>
<td>PHIL 423*</td>
</tr>
<tr>
<td>Biological Science</td>
<td>1</td>
<td>3-4.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Physical Science</td>
<td>2</td>
<td>7.0</td>
<td>CHEM 105* &amp; PHSCS 105*</td>
</tr>
<tr>
<td>Social Science</td>
<td>1</td>
<td>3.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Core Enrichment: Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion Electives</td>
<td>3-4</td>
<td>6.0</td>
<td>from approved list</td>
</tr>
<tr>
<td>Open Electives</td>
<td>Variable</td>
<td>Variable</td>
<td>personal choice</td>
</tr>
</tbody>
</table>

#### Graduation Requirements:

- Minimum residence hours required: 30.0
- Minimum hours needed to graduate: 120.0

### Suggested Sequence of Courses

#### Freshman Year

<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>FRESHMAN YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>4th Semester</td>
</tr>
<tr>
<td>First Year Writing</td>
<td>CHEM 223 (FSp)</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>CHEM 201 (FSp)</td>
</tr>
<tr>
<td>PHSCS 105</td>
<td>GEOL 210 (F)</td>
</tr>
<tr>
<td>PHSCS 107</td>
<td>CPSE 402</td>
</tr>
<tr>
<td>Religion Cornerstone course</td>
<td>PHSCS 137</td>
</tr>
<tr>
<td>Social Science</td>
<td>Religion Cornerstone course</td>
</tr>
<tr>
<td>Total Hours</td>
<td>15.0</td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
</tr>
<tr>
<td>American Heritage</td>
<td></td>
</tr>
<tr>
<td>Biological Science</td>
<td></td>
</tr>
<tr>
<td>PHSCS 106 (FWSu)</td>
<td></td>
</tr>
<tr>
<td>PHSCS 108 (FWSu)</td>
<td></td>
</tr>
<tr>
<td>Languages of Learning</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>15-16.0</td>
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#### Sophomore Year

<table>
<thead>
<tr>
<th>JULIET YEAR</th>
<th>SENIOR YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester</td>
<td>6th Semester</td>
</tr>
<tr>
<td>CHEM 105 (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>CHEM 111 (FW)</td>
<td></td>
</tr>
<tr>
<td>PHSCS 127 (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>Civilization 1</td>
<td></td>
</tr>
<tr>
<td>Religion Cornerstone course</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>16.0</td>
</tr>
<tr>
<td>4th Semester</td>
<td></td>
</tr>
<tr>
<td>CHEM 106 (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>CHEM 107 (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>GEOL 112 (W)</td>
<td></td>
</tr>
<tr>
<td>Civilization 2 &amp; Arts</td>
<td></td>
</tr>
<tr>
<td>Religion elective (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>15-16.0</td>
</tr>
</tbody>
</table>

#### Junior Year

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Semester</td>
<td></td>
</tr>
<tr>
<td>CHEM 105 (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>CHEM 223 (FSp)</td>
<td></td>
</tr>
<tr>
<td>GEOL 210 (F)</td>
<td></td>
</tr>
<tr>
<td>CPSE 402</td>
<td></td>
</tr>
<tr>
<td>Religion Cornerstone course</td>
<td></td>
</tr>
<tr>
<td>SC ED 353</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>17.0</td>
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</table>

#### Senior Year

<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
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</tr>
</thead>
<tbody>
<tr>
<td>6th Semester</td>
<td></td>
</tr>
<tr>
<td>Letters</td>
<td></td>
</tr>
<tr>
<td>PHY S 377 (FW)</td>
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<tr>
<td>SC ED 375</td>
<td></td>
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<tr>
<td>Requirement 2 elective</td>
<td></td>
</tr>
<tr>
<td>Religion elective (FWSpSu)</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>15-16.0</td>
</tr>
</tbody>
</table>

Note: The sequence of courses suggested may not fit the circumstances of every student. Students should contact their college advisement center for help in outlining an efficient schedule.

Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.
**BS in Physical Science Education (690128)**

2022-2023 Program Requirements (80.5 - 81.5 Credit Hours)

**Licensure:** This program meets the educational requirements designed to lead to an occupationally required professional license or certificate in the state of Utah. Students pursuing occupations requiring a license or certificate in a state other than Utah should contact the appropriate BYU academic advisement center as well as the licensing agency in the state where they intend to work to seek information and guidance regarding licensure and certification requirements.

This major is designed to prepare students to teach in public schools. In order to graduate with this major, students are required to complete Utah State Office of Education licensing requirements. To view these requirements go to https://www.schools.utah.gov/curr/licensing or contact the Education Advisement Center, 350 MCKB, 801-422-3426.

For students accepted into the major after December 16, 2019, grades below C in any required coursework in a teaching major or teaching minor will not be accepted. Teacher candidates must maintain a cumulative GPA of 2.7 or higher once admitted into the program and to qualify for student teaching.

For additional details on admission and retention requirements for teaching majors and teaching minors, see Educator Preparation Program Requirements in the Undergraduate Catalog.

**REQUIREMENT 1** Complete 17 courses

**NOTE FOR GEO 210: CONTACT GEOLOGICAL SCIENCES DEPARTMENT (S-389 ESC) BEFORE APRIL 15TH FOR DATES OF UPCOMING AUGUST FIELD TRIP.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105</td>
<td>General College Chemistry 1 with Lab (Integrated)</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 106</td>
<td>General College Chemistry 2</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 107</td>
<td>General College Chemistry Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Chemical Handling and Safe Laboratory Practices</td>
<td>0.5</td>
</tr>
<tr>
<td>CHEM 223</td>
<td>(Not currently offered)</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Guided Learning for Chemistry Instruction</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 111</td>
<td>Physical Geology</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 112</td>
<td>Historical Geology</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 210</td>
<td>Field Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOLCS 105</td>
<td>General Physics 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOLCS 106</td>
<td>General Physics 2</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOLCS 107</td>
<td>General Physics Lab 1</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOLCS 108</td>
<td>General Physics Lab 2</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOLCS 127</td>
<td>Descriptive Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOLCS 137</td>
<td>Energy, Climate, and the Environment</td>
<td>3.0</td>
</tr>
<tr>
<td>PHECS 167</td>
<td>Descriptive Acoustics of Music and Speech</td>
<td>3.0</td>
</tr>
<tr>
<td>PHECS 310</td>
<td>Physics By Inquiry: Mechanics</td>
<td>3.0</td>
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</tbody>
</table>

**REQUIREMENT 2** Complete 1 course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 100</td>
<td>Dinosaurs</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Mineralogy</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL 370</td>
<td>Sedimentology and Stratigraphy</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 480</td>
<td>Paleontology</td>
<td>3.0</td>
</tr>
<tr>
<td>*PHIL 423R</td>
<td>History and Philosophy of Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REQUIREMENT 3** Complete 2 options

**PROFESSIONAL EDUCATION COMPONENT:**

Licensure requirements: Contact the Education Advisement Center, 350 MCKB, 801-422-3426, to schedule the exit interview to clear your application for the secondary teaching license. You should be registered for your last semester at BYU prior to the scheduled appointment.

**OPTION 3.1** Complete 9 courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSE 402</td>
<td>Educating Students with Disabilities in Secondary Classroom</td>
<td>2.0</td>
</tr>
<tr>
<td>IP&amp;T 371</td>
<td>Integrating K-12 Educational Technology 1</td>
<td>1.0</td>
</tr>
<tr>
<td>IP&amp;T 372</td>
<td>Integrating K-12 Educational Technology 2</td>
<td>1.0</td>
</tr>
<tr>
<td>IP&amp;T 373</td>
<td>Teaching in K-12 Online and Blended Learning Contexts</td>
<td>1.0</td>
</tr>
<tr>
<td>PHY S 276</td>
<td>Exploration of Teaching</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY S 377</td>
<td>Teaching Methods and Instruction</td>
<td>3.0</td>
</tr>
<tr>
<td>PHY S 378</td>
<td>Practicum in Secondary Education</td>
<td>1.0</td>
</tr>
<tr>
<td>*SC ED 353</td>
<td>Multicultural Education for Secondary Education</td>
<td>3.0</td>
</tr>
<tr>
<td>SC ED 375</td>
<td>Adolescent Development and Classroom Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: FBI fingerprint and background clearance must be completed prior to enrollment in Phy S 276.

**OPTION 3.2** Complete 12.0 hours from the following course(s)

**APPLY FOR STUDENT TEACHING/INTERNSHIP ONE SEMESTER IN ADVANCE BY SEPTEMBER 30 OR JANUARY 31ST. APPLICATIONS ARE ONLINE AT WWW.BYU.EDU/FIELDSERVICES.HTML.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY S 476</td>
<td>Secondary Student Teaching</td>
<td>12.0v</td>
</tr>
<tr>
<td>PHY S 496</td>
<td>Academic Internship: Secondary Education</td>
<td>12.0v</td>
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</tbody>
</table>

Student teachers/interns must complete all required EPP assessments and paperwork in the Educator system.

**THE DISCIPLINE:**

The Department of Teacher Education provides a program that licenses secondary teachers for public schools. In addition to content courses in the field(s) in which they plan to teach, students complete professional education courses and practicum experiences that prepare them to teach in a secondary school setting.

**CAREER OPPORTUNITIES:**

Secondary education teacher.

**MAP DISCLAIMER**

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

**ADVICEMENT CENTER INFORMATION**

Physical and Mathematical Sciences College Advisement Center
Brigham Young University
N-181 ESC
Provo, UT 84602
Telephone: (801) 422-2674