

|                      |  |
|----------------------|--|
| <b>Major/Program</b> | Chemistry Education, Secondary Certification |
| <b>College</b>       | Science and Mathematics                      |
| <b>Department</b>    | Physical Science                             |
| <b>Contact</b>       | Dave Slimmer, Dean                           |
| 2018-2019            |  |

## Lander University

### 4 - Year Major Guide

|                              |   | First Semester   | Second Semester |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|------------------------------|---|--|-----------------|---------------|-------|----------|--|---|----------------------|---|---|----------|--|---|------------------------|--|---|-------------------|--|---|----------|--|-----------------|-----------|---|-----------------|-----------|---|----------|--|-------|----------|---|----|--------------------|---|-----|-------------------|--|-----|-------------------|--|-----------------|------------------------|----------------|-----------------|-------------|---------------|-----------------|-------------|--|---------------|------|
| <b>First Year</b>            |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>CHEM 111</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>MATH 121 or MATH 123</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>ENGL 101</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Foreign Language</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>LINK 101</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">1</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>14</b></td> </tr> </tbody> </table> | Course          | Notes         | Hours | CHEM 111 |  | 4 | MATH 121 or MATH 123 | Core Academic Skills (General Education)                  | 3 | ENGL 101 | Core Academic Skills (General Education) | 3 | Foreign Language       | Core Academic Skills (General Education)               | 3 | LINK 101          | Core Academic Skills (General Education) | 1 |          |  | <b>Subtotal</b> | <b>14</b> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>CHEM 112</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>MATH 211</td> <td>Scientific and Mathematical Reasoning (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>ENGL 102</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>General Education</td> <td>Behavioral and Social Perspectives (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>General Education</td> <td>Humanities and Fine Arts (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>16</b></td> </tr> </tbody> </table> | Course          | Notes     | Hours   | CHEM 112 |  | 4     | MATH 211 | Scientific and Mathematical Reasoning (General Education) | 3  | ENGL 102           | Core Academic Skills (General Education)                  | 3   | General Education | Behavioral and Social Perspectives (General Education) | 3   | General Education | Humanities and Fine Arts (General Education) | 3               |                        |                | <b>Subtotal</b> | <b>16</b>   | <b>TOTALS</b> |                 |             |  |               |      |
|                              | Course  | Notes  | Hours           |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | CHEM 111  |  | 4               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | MATH 121 or MATH 123                                      | Core Academic Skills (General Education)   | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | ENGL 101  | Core Academic Skills (General Education)   | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Foreign Language             | Core Academic Skills (General Education)                  | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| LINK 101                     | Core Academic Skills (General Education)                  | 1  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>14</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Course                       | Notes   | Hours  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| CHEM 112                     |   | 4  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| MATH 211                     | Scientific and Mathematical Reasoning (General Education) | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| ENGL 102                     | Core Academic Skills (General Education)                  | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| General Education            | Behavioral and Social Perspectives (General Education)    | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| General Education            | Humanities and Fine Arts (General Education)              | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>16</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   |  |                 | Yearly Totals | 30    |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| <b>Second Year</b>           |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>CHEM 221</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>PHYS 201</td> <td>Scientific and Mathematical Reasoning (General Education)</td> <td style="text-align: center;">4</td> </tr> <tr> <td>EDUC 204</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>General Education</td> <td>Behavioral and Social Perspectives (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>General Education</td> <td>Elective (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>17</b></td> </tr> </tbody> </table>                        | Course          | Notes         | Hours | CHEM 221 |  | 4 | PHYS 201             | Scientific and Mathematical Reasoning (General Education) | 4 | EDUC 204 |  | 3 | General Education      | Behavioral and Social Perspectives (General Education) | 3 | General Education | Elective (General Education)             | 3 |          |  | <b>Subtotal</b> | <b>17</b> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>BIOL 101</td> <td>General Education Elective (General Education)</td> <td style="text-align: center;">4</td> </tr> <tr> <td>PHYS 202</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>EDUC 203</td> <td></td> <td style="text-align: center;">0.5</td> </tr> <tr> <td>Elective</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>General Education</td> <td>Humanities and Fine Arts (General Education)</td> <td style="text-align: center;">3</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>14.5</b></td> </tr> </tbody> </table>   | Course          | Notes     | Hours   | BIOL 101 | General Education Elective (General Education) | 4     | PHYS 202 |   | 4  | EDUC 203           |   | 0.5 | Elective          |  | 3   | General Education | Humanities and Fine Arts (General Education) | 3               |                        |                | <b>Subtotal</b> | <b>14.5</b> |               | Yearly Totals   | 31.5        |  |               |      |
|                              | Course  | Notes  | Hours           |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | CHEM 221  |  | 4               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | PHYS 201  | Scientific and Mathematical Reasoning (General Education)  | 4               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | EDUC 204  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| General Education            | Behavioral and Social Perspectives (General Education)    | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| General Education            | Elective (General Education)                              | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>17</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Course                       | Notes   | Hours  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| BIOL 101                     | General Education Elective (General Education)            | 4  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| PHYS 202                     |   | 4  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| EDUC 203                     |   | 0.5  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Elective                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| General Education            | Humanities and Fine Arts (General Education)              | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>14.5</b>     |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| <b>Third Year</b>            |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>EDUC 223</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>EDUC 240</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>SPED 223</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>Elective</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>Elective</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>15</b></td> </tr> </tbody> </table>   | Course          | Notes         | Hours | EDUC 223 |  | 3 | EDUC 240             |   | 3 | SPED 223 |  | 3 | Elective               |  | 3 | Elective          |  | 3 |          |  | <b>Subtotal</b> | <b>15</b> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>CHEM 331</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>CHEM 420</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>CHEM 381 or ES 490</td> <td>Elective (General Education) (Global Issues and Cultures)</td> <td style="text-align: center;">3</td> </tr> <tr> <td>EDUC 329</td> <td></td> <td style="text-align: center;">0.5</td> </tr> <tr> <td>EDUC 320</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>Major Program Elective</td> <td>see list below</td> <td style="text-align: center;">3</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>16.5</b></td> </tr> </tbody> </table>                                     | Course          | Notes     | Hours   | CHEM 331 |  | 4     | CHEM 420 |   | 3  | CHEM 381 or ES 490 | Elective (General Education) (Global Issues and Cultures) | 3   | EDUC 329          |  | 0.5 | EDUC 320          |  | 3               | Major Program Elective | see list below | 3               |             |               | <b>Subtotal</b> | <b>16.5</b> |  | Yearly Totals | 31.5 |
|                              | Course  | Notes  | Hours           |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | EDUC 223  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | EDUC 240  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | SPED 223  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Elective                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Elective                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>15</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Course                       | Notes   | Hours  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| CHEM 331                     |   | 4  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| CHEM 420                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| CHEM 381 or ES 490           | Elective (General Education) (Global Issues and Cultures) | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| EDUC 329                     |   | 0.5  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| EDUC 320                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Major Program Elective       | see list below  | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>16.5</b>     |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| <b>Fourth Year</b>           |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>EDUC 321</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>EDUC 429</td> <td></td> <td style="text-align: center;">1</td> </tr> <tr> <td>PSCI 451</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>Major Program Elective</td> <td>see list below</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Elective</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td>Elective</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>15</b></td> </tr> </tbody> </table>   | Course          | Notes         | Hours | EDUC 321 |  | 3 | EDUC 429             |   | 1 | PSCI 451 |  | 3 | Major Program Elective | see list below   | 3 | Elective          |  | 3 | Elective |  | 2               |           |   | <b>Subtotal</b> | <b>15</b> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course</th> <th>Notes</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>EDUC 461</td> <td></td> <td style="text-align: center;">11</td> </tr> <tr> <td>EDUC 499</td> <td></td> <td style="text-align: center;">1</td> </tr> <tr> <td>FALS 101</td> <td>Core Academic Skills (General Education)</td> <td style="text-align: center;">0</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Subtotal</b></td> <td style="text-align: center;"><b>12</b></td> </tr> </tbody> </table> | Course   | Notes  | Hours | EDUC 461 |   | 11 | EDUC 499           |   | 1   | FALS 101          | Core Academic Skills (General Education)               | 0   |                   |  | <b>Subtotal</b> | <b>12</b>              |                | Yearly Totals   | 27          |               |                 |             |  |               |      |
|                              | Course  | Notes  | Hours           |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | EDUC 321  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | EDUC 429  |  | 1               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              | PSCI 451  |  | 3               |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Major Program Elective       | see list below  | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Elective                     |   | 3  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Elective                     |   | 2  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>15</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| Course                       | Notes   | Hours  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| EDUC 461                     |   | 11   |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| EDUC 499                     |   | 1  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| FALS 101                     | Core Academic Skills (General Education)                  | 0  |                 |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
|                              |   | <b>Subtotal</b>  | <b>12</b>       |               |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |
| <b>Total Hours Required:</b> |   |  |                 | <b>120</b>    |       |          |  |   |                      |   |   |          |  |   |                        |  |   |                   |  |   |          |  |                 |           |   |                 |           |   |          |  |       |          |   |    |                    |   |     |                   |  |     |                   |  |                 |                        |                |                 |             |               |                 |             |  |               |      |

Major Program Electives: Choose two of the following: CHEM 222, CHEM 260, CHEM 301, CHEM 341, CHEM 360, or CHEM 401