

## Chemistry – ProTeach (M.Ed.) Content Requirements

| <b>Mathematics Coursework</b> |                 |                                           |                |
|-------------------------------|-----------------|-------------------------------------------|----------------|
|                               | <b>Course</b>   | <b>Title</b>                              | <b>Credits</b> |
|                               | <b>MAC 2311</b> | <b>Analytic Geometry &amp; Calculus I</b> | <b>4</b>       |
|                               | <b>MAC 2312</b> | <b>Calculus 2</b>                         | <b>4</b>       |
|                               | <b>MAC 2313</b> | <b>Calculus 3</b>                         | <b>4</b>       |
|                               |                 | <b>Total</b>                              | <b>12</b>      |

**Notes:**

| <b>Chemistry Coursework</b> |                  |                                                              |                |
|-----------------------------|------------------|--------------------------------------------------------------|----------------|
|                             | <b>Course</b>    | <b>Title</b>                                                 | <b>Credits</b> |
|                             | <b>CHM 2045</b>  | <b>General Chemistry &amp; Qual Analysis (or equivalent)</b> | <b>3</b>       |
|                             | <b>CHM 2045L</b> | <b>General Chemistry Lab</b>                                 | <b>1</b>       |
|                             | <b>CHM 2046</b>  | <b>General Chemistry &amp; Qual Analysis</b>                 | <b>3</b>       |
|                             | <b>CHM 2046L</b> | <b>General Chemistry Lab</b>                                 | <b>1</b>       |
|                             | <b>CHM 2210</b>  | <b>Organic Chemistry</b>                                     | <b>3</b>       |
|                             | <b>CHM 2211</b>  | <b>Organic Chemistry 2</b>                                   | <b>3</b>       |
|                             | <b>CHM 2211L</b> | <b>Organic Chemistry Lab</b>                                 | <b>2</b>       |
|                             | <b>CHM 3120</b>  | <b>Intro to Analytical Chemistry</b>                         | <b>3</b>       |
|                             | <b>CHM 3120L</b> | <b>Analytical Chemistry Lab</b>                              | <b>1</b>       |
|                             | <b>CHM 3610</b>  | <b>Inorganic Chemistry</b>                                   | <b>3</b>       |
|                             | <b>CHM 4130</b>  | <b>Instrumental Analysis</b>                                 | <b>3</b>       |
|                             | <b>CHM 4130L</b> | <b>Instrumental Analysis Lab</b>                             | <b>1</b>       |
|                             | <b>CHM 4411</b>  | <b>Physical Chemistry 1</b>                                  | <b>4</b>       |

|          |           |                           |    |
|----------|-----------|---------------------------|----|
|          | CHM 4412  | Physical Chemistry 2      | 4  |
| Choose 1 | CHM 4411L | Physical Chemistry Lab    | 2  |
|          | CHM 4413L | Biophysical Chemistry Lab |    |
|          |           | Total                     | 37 |

Notes:

| Biology Coursework |                       |                                     |         |
|--------------------|-----------------------|-------------------------------------|---------|
|                    | Course                | Title                               | Credits |
|                    | BSC 2010<br>BCS 2010L | Integrated Principles of Biology I  | 4       |
|                    | BSC 2011<br>BCS 2011L | Integrated Principles of Biology II | 4       |
|                    |                       | Total                               | 8       |

Notes:

| Physics Coursework |           |                         |         |
|--------------------|-----------|-------------------------|---------|
|                    | Course    | Title                   | Credits |
| Choose 1           | PHY 2053  | Physics 1               | 8       |
|                    | PHY 2053L | Physics Lab             |         |
|                    | PHY 2054  | Physics 2               |         |
|                    | PHY 2054L | Physics Lab             |         |
| Choose 1           | PHY 2048  | Physics with Calculus 1 | 10      |
|                    | PHY 2048L | Lab for Physics         |         |
|                    | PHY 2049  | Physics for Calculus 2  |         |
|                    | PHY 2049L | Lab for Physics         |         |
|                    |           | Total                   | 8-10    |

Notes: