

## Initial Secondary Endorsement Biology 5-12

Students majoring in Elementary Education are required to select at least one endorsement area in addition to the Elementary Education major requirements. Students must earn a minimum 3.0 GPA in courses required for the endorsement. No D grades are accepted. Please see the Elementary Education major sheet and/or the university catalog for additional information.

**Iowa Teaching Endorsement:** #151

Requirements for the Endorsement: 35 semester credits

## Essential Competencies-Outcome Iterations \*\*Transfer courses do not receive outcome iterations\*\*

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|--|---|--------------------------------|---|----|---|---|---|----|---|
|  |   |                                | CI  | IL | W | 0 | Q | GA | V |
| BIOL 101   | General Biology I   | 4                              | х   |    | х |   |   |    |   |
| BIOL 102   | General Biology II  | 4                              | Х   | Х  | Х |   |   |    |   |
| BIOL 209   | Environmental Science   | 3                              | Х   |    |   |   |   | Х  | Х |
| BIOL 256   | Microbiology  | 4                              | Х   |    |   |   |   |    |   |
| BIOL 360   | Genetics  | 4                              |   |    |   |   | Х | х  |   |
| BIOL 160 and<br>BIOL 165<br>Or<br>BIOL 315 and<br>BIOL 335 | Human Anatomy and Human Physiology Or Comparative Vertebrate Anatomy and Physiology | 4 and<br>4<br>Or<br>4 and<br>4 |   |    |   |   |   |    |   |
| CHEM 111   | General Chemistry I   | 4                              | х   |    |   |   | х |    |   |
| CHEM 112   | General Chemistry II  | 4                              |   |    |   |   |   |    |   |