

# Bachelor of Science (B.S.) Degree with Major in Chemistry

## Sample Four-Year Plan Starting in Odd Year

### First Year Fall (Odd Year)

|     |      |                        |
|-----|------|------------------------|
| BBL | 1013 | Old Testament Survey   |
| CHM | 1124 | General Chemistry I    |
| COR | 1002 | Gateway Seminar        |
| EGL | 1013 | English I: Composition |
| MTH | 1134 | Calculus I             |

Total Hours 16

### First Year Spring (Even Year)

|     |      |  |
|-----|------|--|
| BBL | 1023 | New Testament Survey                   |
| CHM | 1134 | General Chemistry II                   |
| EGL | 1023 | English II: Literary Analysis/Research |
| MTH | 1144 | Calculus II                            |

Total Hours 14

### Second Year Fall (Even Year)

|     |      |                                       |
|-----|------|---------------------------------------|
| CHM | 3134 | Organic Chemistry I                   |
| HST | 2013 | Integrated Humanities I               |
| PHY | 2114 | General Physics I                     |
|     | ___3 | Social/Behavioral Sci. (SBS) Elective |

Total Hours 14

### Second Year Spring (Odd Year)

|     |      |                                   |
|-----|------|-----------------------------------|
| CHM | 3144 | Organic Chemistry II              |
| HST | 2023 | Integrated Humanities II          |
| MTH | 2103 | Applied Statistics for Scientists |
| PHY | 2124 | General Physics II                |
|     | ___2 | Whole Person Wellness Elective    |

Total Hours 16

### Third Year Fall (Odd Year)

|      |      |                                   |
|------|------|-----------------------------------|
| CHM  | 3183 | Advanced Inorganic Chemistry†     |
| CHIM | ___4 | Chemistry Elective                |
|      | ___3 | Arts & Humanities (AH) Elective   |
|      | ___3 | Intercultural Engagement Elective |
|      | ___3 | Elective                          |

Total Hours 16

### Third Year Spring (Even Year)

|     |      |                                    |
|-----|------|------------------------------------|
| BBL | 2013 | Essentials of Evangelical Theology |
| CHM | 4124 | Physical Chemistry-Thermodynamic†  |
| CHM | ___3 | Elective                           |
|     | ___3 | Elective                           |
|     | ___2 | Elective                           |

Total Hours 15

### Fourth Year Fall (Even Year)

|     |      |                                   |
|-----|------|-----------------------------------|
| BBL | 2022 | Essentials of Christian Formation |
| CHM | 3114 | Advanced Analytical Chemistry†    |
|     | ___3 | SBS or AH Elective (see above)    |
|     | ___3 | Elective                          |
|     | ___3 | Elective                          |

Total Hours 15

### Fourth Year Spring (Odd Year) – Major Field Test Exam

|     |      |                                 |
|-----|------|---------------------------------|
| CHM | 4134 | Physical Chemistry-Quantum†     |
| CHM | 4501 | Chemistry/Biochemistry Capstone |
| GSC | 4133 | Faith and Science               |
|     | ___3 | Elective                        |
|     | ___3 | Elective                        |

Total Hours 14

### **Total Hours for Four Years: 120**

† Note: The order of alternate year courses will differ depending on whether a student begins their studies @ JBU in an even/ odd year.

### Chemistry Electives

|          |   |            |                              |
|----------|---|------------|------------------------------|
| CHM 1101 | Chemistry Practicum (Request)           | CHM 4221-3 | Chemistry Research (Every)   |
| CHM 3101 | Chemistry Practicum: Teaching (Request) | CHM 4310   | Chemistry Internship (Every) |
| CHM 3164 | Biochemistry I (Fall)                   | RE 3124    | Bio-Fuels & Biomass          |
| CHM 3174 | Biochemistry II (Spring, ODD)           |            |                              |

# Bachelor of Science (B.S.) Degree with Major in Chemistry

## Sample Four-Year Plan Starting in Even Year

### First Year Fall (Even Year)

|     |      |                        |
|-----|------|------------------------|
| BBL | 1013 | Old Testament Survey   |
| CHM | 1124 | General Chemistry I    |
| COR | 1002 | Gateway Seminar        |
| EGL | 1013 | English I: Composition |
| MTH | 1134 | Calculus I             |

Total Hours 16

### First Year Spring (Odd Year)

|     |      |  |
|-----|------|--|
| BBL | 1023 | New Testament Survey                   |
| CHM | 1134 | General Chemistry II                   |
| EGL | 1023 | English II: Literary Analysis/Research |
| MTH | 1144 | Calculus II                            |
|     | ___2 | Whole Person Wellness Elective         |

Total Hours 16

### Second Year Fall (Odd Year)

|     |      |                                       |
|-----|------|---------------------------------------|
| CHM | 3134 | Organic Chemistry I                   |
| HST | 2013 | Integrated Humanities I               |
| PHY | 2114 | General Physics I                     |
|     | ___3 | Social/Behavioral Sci. (SBS) Elective |

Total Hours 14

### Second Year Spring (Even Year)

|     |      |                                   |
|-----|------|-----------------------------------|
| CHM | 3144 | Organic Chemistry II              |
| HST | 2023 | Integrated Humanities II          |
| MTH | 2103 | Applied Statistics for Scientists |
| PHY | 2124 | General Physics II                |

Total Hours 14

### Third Year Fall (Even Year)

|     |      |                                 |
|-----|------|---------------------------------|
| CHM | 3114 | Advanced Analytical Chemistry†  |
| CHM | ___4 | Chemistry Elective              |
|     | ___3 | Arts & Humanities (AH) Elective |
|     | ___3 | Elective                        |
|     | ___2 | Elective                        |

Total Hours 16

### Third Year Spring (Odd Year)

|     |      |                                    |
|-----|------|------------------------------------|
| BBL | 2013 | Essentials of Evangelical Theology |
| CHM | 4134 | Physical Chemistry-Quantum†        |
|     | ___4 | Elective                           |
|     | ___3 | Elective                           |
|     | ___2 | Elective                           |

Total Hours 16

### Fourth Year Fall (Odd Year)

|     |      |                                   |
|-----|------|-----------------------------------|
| BBL | 2022 | Essentials of Christian Formation |
| CHM | 3183 | Advanced Inorganic Chemistry†     |
|     | ___3 | SBS or AH Elective (see above)    |
|     | ___3 | Elective                          |
|     | ___3 | Elective                          |

Total Hours 14

### Fourth Year Spring (Even Year) – Major Field Test Exam

|     |      |                                   |
|-----|------|-----------------------------------|
| BIO | 4103 | Bioethics (or GSC 4133)           |
| BIO | 4501 | Chemistry/Biochemistry Capstone   |
| CHM | 4124 | Physical Chemistry-Thermodynamic† |
|     | ___3 | Intercultural Engagement Elective |
|     | ___3 | Elective                          |

Total Hours 14

### **Total Hours for Four Years: 120**

† Note: The order of alternate year courses will differ depending on whether a student begins their studies @ JBU in an even/ odd year.

### Chemistry Electives

|          |   |            |                              |
|----------|---|------------|------------------------------|
| CHM 1101 | Chemistry Practicum (Request)           | CHM 4221-3 | Chemistry Research (Every)   |
| CHM 3101 | Chemistry Practicum: Teaching (Request) | CHM 4310   | Chemistry Internship (Every) |
| CHM 3164 | Biochemistry I (Fall)                   | RE 3124    | Bio-Fuels & Biomass          |
| CHM 3174 | Biochemistry II (Spring, ODD)           |            |                              |