### Bachelor of Science in Chemistry

**Recommended Program Plan beginning Fall 2014 (even year)**

*(Subject to change depending on credits transferred in by student)*

**Chemistry Program Plan Coordinators:** Dr. Dave Clevette, Dr. Andrea Holmes, Dr. Erin Wilson, Dr. Sharmin Sikich, Dr. Mark Wilson

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#### Prior to Year #1

9 Credits (minimum)¹ – Evaluated during creating of program plan.

- CHM 125 – General Chemistry 1 (4) – REQUIRED²
- CHM 126 – General Chemistry 2 (4) – REQUIRED²
- General Electives (1)

#### Year #1

**Fall – 18 Credits**

- LAR 101 – Liberal Arts Seminar (3)
- CHM 110 – Professional Development in the Chemical Sciences (1)
- CHM 205 – Organic Chemistry I (4)
- MTH 235 – Calculus I (4)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Spring – 18 Credits**

- CHM 195 – Introduction to Chemical Research (1)
- CHM 206 – Organic Chemistry II (4)
- MTH 236 – Calculus II (4)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Summer after Year #1**

6 Credits – Approved with guidance of faculty advisor

#### Year #2

**Fall – 16-18 Credits**

- LAR 202 – Liberal Arts Seminar (3)
- CHM 303 – Analytical Chemistry (4)
- CHM 330 – Biochemistry (4) OR General Elective (3)³
- CHM 351 – Chemical Research I (2)⁴ or General Elective (3)
- PHY 107 or 201 – General Physics I (4)

**Spring – 15-17 Credits**

- CHM 322 – Instrumental Analysis (4) OR General Elective (3)³
- CHM 351 – Chemical Research I (2)⁴ or General Elective (3)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)³

**Summer after Year #2**

6 Credits – Approved with guidance of faculty advisor

#### Year #3

**Fall – 18-19 Credits**

- LAR 303 – Liberal Arts Seminar (3)
- CHM 411 – Physical Chemistry I (4)
- CHM 495 – Chemical Research II (2)
- CHM 330 – Biochemistry (4) OR General Elective (3)³
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Spring – 15-16 Credits**

- CHM 326 – Advanced Inorganic Chemistry (4) OR General Elective (3)³
- CHM 412 – Physical Chemistry II (4)
- CHM 494 – Presenting Chemical Research (0)
- CHM 496 – Chemical Research III (2)
- General Elective (3)³
- General Elective (3)

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**IMPORTANT:**

1. Students are required to transfer in 9 credits for 3-year guarantee eligibility. These credits have the potential to alter program plan slightly but careful planning is required to maintain Chemistry course schedule. If a student transfers more than 9 credits to start, it can either affect the student’s semester or summer loads in the 3-year program plan.

2. AP credit may NOT be used to satisfy the General Chemistry (CHM 125 and 126) requirement.

3. Two of the three courses CHM 322, 326, and 330 must be taken to fulfill the Chemistry major requirements. The third course is highly recommended but not required.

4. CHM 351 may be taken in either the Fall or Spring semester, but may only be taken one time.

5. CHM 430: Advanced Biochemistry is not required for the major, but should be considered in one of the General Elective slots for students considering graduate school in chemistry or biochemistry, or considering jobs in the biochemical field.

6. Students are required to earn 123 credits for graduation. The above plan shows 9 credits transferred in prior to enrollment, 12 credits during summers after years 1 and 2, plus the total of 103-104 credits earned during fall and spring semesters.

7. The Undergraduate Core requires 3 LAR courses, 7 FAK courses (CHM 125 and MTH 235 are each FAK courses), and 1 experiential learning course (CHM 495-496). These have been met in the above plan.

8. Students should consider incorporating a minor (usually at least 18 credits) into his/her individual program. The chemistry major allows for relative flexibility with General Electives to be replaced with minor program coursework.
### Bachelor of Science in Chemistry

**Recommended Program Plan beginning Fall 2015 (odd year)**

*(Subject to change depending on credits transferred in by student)*

**Chemistry Program Plan Coordinators:** Dr. Dave Clevette, Dr. Andrea Holmes, Dr. Erin Wilson, Dr. Sharmin Sikich, Dr. Mark Wilson

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**Prior to Year #1**

9 Credits (minimum)\(^1\) – Evaluated during creating of program plan.

- CHM 125 – General Chemistry 1 (4) – REQUIRED\(^2\)
- CHM 126 – General Chemistry 2 (4) – REQUIRED\(^2\)
- General Electives (1)

**Year #1**

**Fall – 18 Credits**

- LAR 101 – Liberal Arts Seminar (3)
- CHM 110 – Professional Development in the Chemical Sciences (1)
- CHM 205 – Organic Chemistry I (4)
- MTH 235 – Calculus I (4)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Spring – 18 Credits**

- CHM 195 – Introduction to Chemical Research (1)
- CHM 206 – Organic Chemistry II (4)
- MTH 236 – Calculus II (4)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Summer after Year #1**

6 Credits – Approved with guidance of faculty advisor

**Year #2**

**Fall – 16-18 Credits**

- LAR 202 – Liberal Arts Seminar (3)
- CHM 303 – Analytical Chemistry (4)
- CHM 330 – Biochemistry (4) OR General Elective (3)\(^3\)
- CHM 351 – Chemical Research I (2)\(^4\) or General Elective (3)
- PHY 107 or 201 – General Physics I (4)

**Spring – 15-17 Credits**

- CHM 326 – Advanced Inorganic Chemistry (4) OR General Elective (3)\(^3\)
- PHY 108 or 202 – General Physics II (4)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- CHM 351 – Chemical Research I (2)\(^4\) or General Elective (3)
- General Elective (3)\(^3\)

**Summer after Year #2**

6 Credits – Approved with guidance of faculty advisor

**Year #3**

**Fall – 18-19 Credits**

- LAR 303 – Liberal Arts Seminar (3)
- CHM 411 – Physical Chemistry I (4)
- CHM 495 – Chemical Research II (2)
- CHM 330 – Biochemistry (4) OR General Elective (3)\(^3\)
- FAK – Foundational Area of Knowledge – Core Requirement (3)
- General Elective (3)

**Spring – 15-16 Credits**

- CHM 322 – Instrumental Analysis (4) OR General Elective (3)\(^3\)
- CHM 412 – Physical Chemistry II (4)
- CHM 494 – Presenting Chemical Research (0)
- CHM 496 – Chemical Research III (2)
- General Elective (3)\(^5\)
- General Elective (3)

**IMPORTANT:**

1. Students are required to transfer in 9 credits for 3-year guarantee eligibility. These credits have the potential to alter program plan slightly but careful planning is required to maintain Chemistry course schedule. If a student transfers more than 9 credits to start, it can either affect the student’s semester or summer loads in the 3-year program plan.

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7. The Undergraduate Core requires 3 LAR courses, 7 FAK courses (CHM 125 and MTH 235 are each FAK courses), and 1 experiential learning course (CHM 495-496). These have been met in the above plan.

8. Students should consider incorporating a minor (usually at least 18 credits) into his/her individual program. The chemistry major allows for relative flexibility with General Electives to be replaced with minor program coursework.