CHEMISTRY BA-Biochemistry Concentration
Fall 2017 – Spring 2018

CONTACT INFORMATION
- Honors College Advisor: Patricia Granfield (pgranfie@gmu.edu)
- Department Chair: Gerald Weatherspoon
- Department Undergraduate Coordinator: Suzanne Slayden (sslayden@gmu.edu)

Once students begin attending Mason and declare a major they should see both their Honors College and their major department advisor for advising. Students must confirm their major requirements with their department advisor, with the University catalog http://catalog.gmu.edu/colleges-schools/science/chemistry-biochemistry/chemistry-ba/#requirementstext, and with Patriot Web’s Degree Evaluation.

NOTE FROM CHEMISTRY DEPARTMENT: CHEM 211/213 and 212/214 are prerequisites (C or better grade) for all chemistry courses at the 300- and 400-level. Also, almost all other chemistry courses have additional prerequisites (C or better grade). Students must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of 'D' (1.00) in CHEM coursework at graduation.

Many courses are only offered one semester; keep that in mind as you plan your schedule. Fall only classes are marked (F) and Spring only are marked (S), but these are subject to change.

HONORS REQUIREMENTS (see advising section of Honors College website for further details https://honorscollege.gmu.edu/academics/academic-advising.)
- All Honors College students must complete Requirement 1 (HNRS 110 and 353) and Requirement 2 of the Honors College Curriculum, including taking 3 courses under Requirement 2. In general, students earning a BA will take HNRS 122, HNRS 131, and HNRS 240 to fulfill Requirement 2. Any substitutions for these courses should be approved by your Honors College advisor.
- Students earning a BA must complete two additional humanities and social science general education courses beyond Requirements 1 and 2 of the Honors College Curriculum. This requirement may be satisfied by taking HNRS 130 and HNRS 230, which also satisfy Honors College Requirement 3. Students who fulfill Honors College Requirement 3 by taking courses other than HNRS 130 and/or HNRS 230 should confirm with their Degree Evaluation and Honors College advisor that they have completed the humanities and social science requirements.

ADVISING SHEET
- Honors College Requirement
- Department Requirement

<table>
<thead>
<tr>
<th>1st Year – 1st Semester (Fall)</th>
<th>Credits</th>
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<tbody>
<tr>
<td>o HNRS 110: Research Methods (grade C or better required)</td>
<td>4</td>
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<tr>
<td>o HNRS 122: Reading the Arts</td>
<td>3</td>
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<tr>
<td>♦ MATH 113: Analytic Geometry and Calculus I (placement exam is required)²</td>
<td>4</td>
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<tr>
<td>♦ CHEM 211/211H: General Chemistry I¹ and CHEM 213: General Chemistry Lab I</td>
<td>4</td>
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<tr>
<td>Semester Total</td>
<td>15</td>
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1st Year – 2nd Semester (Spring)

- HNRS 130: Conceptions of Self 3
- MATH 114: Analytic Geometry and Calculus II (prerequisite: C or better in MATH 113) or MATH 116: Honors Analytic Geometry and Calculus II 4
- CHEM 212/212H: General Chemistry II and CHEM 214: General Chemistry II Lab 4
- BIOL 213/213H: Cell Structure and Function Prerequisite for BIOL 213H, honors section only: AP Biology or equivalent IB/HL or dual enrollment course in high school 4

Semester Total: 15

2nd Year – 1st Semester (Fall)

- HNRS 131: Contemporary Society in Multiple Perspectives 3
- PHYS 243: College Physics I and PHYS 244: College Physics I Lab 4
- STAT 250: Introductory Statistics I 3

Semester Total: 15

2nd Year – 2nd Semester (Spring)

- HNRS 230: Cross-Cultural Perspectives 3
- CHEM 321: Elementary Quantitative Analysis (Prerequisite: MATH 113, Co-require: MATH 114) 4
- PHYS 245: College Physics II and PHYS 246: College Physics II Lab 4

Semester Total: 16

3rd Year – 1st Semester (Fall)

- HNRS 240: Reading the Past 3
- CHEM 463: General Biochemistry I (Prerequisites: BIOL 213, CHEM 313) 4
- CHEM 331: Physical Chemistry I \( ^3 \) (F) (Pre-requisite: MATH 113. Pre- or co-requisite: PHYS 243) 3
- Foreign Language 6

Semester Total: 16

3rd Year – 2nd Semester (Spring)

- HNRS 353: Technology in the Contemporary World (grade of C or better required) 3
- CHEM 464: General Biochemistry II \( ^3 \) (S) (Prerequisites: CHEM 314, CHEM 463) 3
- CHEM 465: Biochemistry Lab (Prerequisite: CHEM 315. Pre- or Co-requisite: CHEM 463) 2
- CHEM 336: Physical Chemistry Lab I (Prerequisites: CHEM 321, MATH 114. Pre- or co-requisites: CHEM 331, PHYS 243) 2
- Foreign Language 3
- Elective 2

Semester Total: 15
<table>
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<th>4th Year – 1st Semester (Fall)</th>
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<tr>
<td>♦ CHEM 446: Bio-inorganic Chemistry (F) (Prerequisite: CHEM 331, CHEM 336, CHEM 463)</td>
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<td>♦ Electives, 300 level or above as needed</td>
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<td>♦ Elective</td>
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<td>Semester Total</td>
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<tr>
<td>4th Year – 2nd Semester (Spring)</td>
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<td>♦ Electives, 300 level or above as needed</td>
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<td>♦ Electives</td>
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<tr>
<td>Semester Total</td>
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<td>Total Hours</td>
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NOTES
1. The Honors sections of these courses can be used to satisfy Honors College Requirement 3.
2. MATH 113 fulfills the quantitative reasoning requirement for Honors. MATH 113 requires a placement exam. See the Math department for exam days and times.
3. CHEM 331 and CHEM 446, which are required for those following the biochemistry track, are offered during Fall semesters only. CHEM 464, which is required for those following the biochemistry track, is offered during Spring semesters only. Plan your schedules accordingly.
4. Students seeking a bachelor’s degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements.
5. Students who fulfill Honors College Requirement 3 by taking courses other than HNRS 130 and/or HNRS 230 must complete the corresponding humanities and social science requirements with courses that are outlined in the University Catalog for your catalog year.