BIOLOGY BS – STEM TRACK
Fall 2009 – Spring 2010

CONTACT INFORMATION

- Honors College Advisor: Kathleen Alligood (alligood@gmu.edu)
- Department Chair: Larry Rockwood
- Department Associate Chair: Cyndy Beck (cbeck@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.

REQUIRED HOURS

- Hours Required in Major: 45
- Hours Required in Honors: see honors advisor
- This major requires a total of 120 - 123 credits to graduate, 45 of which must be at the 300-level and above.

ADVISING SHEET

- ○ Honors College Requirement
- ♦ Department Requirement
- ⅄ College Requirement

1st Year – 1st Semester (Fall)	Credits
○ HNRS 110: Introduction to Research (grade C or better required)	4
♦ MATH 113: (a placement exam is required) or HNRS 125 [3]	4
♦ CHEM 211 or 211H: General Chemistry [1]	4
♦ BIOL 213 or 213H: Cell Structure and Function [1] (grade of C or better required)	4
Semester Total	16

1st Year – 2nd Semester (Spring)	
○ HNRS 122: Reading the Arts	3
♦ MATH 114: (prerequisite: C or better in MATH 113) or MATH 116[3]	4
♦ BIOL 303 or BIOL 303H: Animal Biology	4
♦ CHEM 212 or 212H: General Chemistry [1]	4
Semester Total	15

2nd Year – 1st Semester (Fall)	
○ HNRS 131: Contemporary Society in Multiple Perspectives	3
♦ CHEM 313: Organic Chemistry (corequistie: CHEM 315)	3
♦ CHEM 315: Organic Chemistry Lab I (corequisite: CHEM 313)	2
♦ BIOL 304: Plant Biology	4
♦ Elective	3
Semester Total	15

2nd Year – 2nd Semester (Spring)	
♦ CHEM 314: Organic Chemistry (corequisite: CHEM 318)	3
♦ CHEM 318: Organic Chemistry Lab II (corequisite: CHEM 314)	2
♦ BIOL 305/306: Biology of Microorganisms/Biology of Microorganisms Lab	4

♦ Electives	6
Semester Total	15
3rd Year – 1st Semester (Fall)	
○ HNRS 240: Reading the Past	3
♦ PHYS 243: College Physics (corequisite: PHYS 244)	3
♦ PHYS 244: College Physics Lab (corequisite: PHYS 243)	1
♦ BIOL 307: Ecology	4
♦ BIOL 311: General Genetics	4
Semester Total	15
3rd Year – 2nd Semester (Spring)	
○ HNRS 353: Technology in the Contemporary World (grade of C or better required)	3
♦ PHYS 245: College Physics (corequisite: PHYS 246)	4
♦ PHYS 246: College Physics Lab (corequisite: PHYS 245)	1
♦ BIOL Electives	8
♦ (Honors in Biology need BIOL 494) [2]	(1)
Semester Total	16/17
4th Year – 1st Semester (Fall)	
♦ BIOL Electives	7
♦ Elective	5
♦ (Honors in Biology need BIOL 494) [2]	(1)
Semester Total	12/13
4th Year – 2nd Semester (Spring)	
♦ BIOL Elective(s)	1-5
♦ Electives	12
♦ (Honors in Biology need BIOL 494) [2]	(1)
Semester Total	14 / 16
Total Hours	120

NOTES

1. To complete the STEM Track, students must take two (2) of the following courses:
   - BIOL 213H
   - BIOL 303H
   - ECON 103H
   - CHEM 211H
   - CHEM 212H
   - CS 211H
   - MATH 116
   - MATH 215
   - PHYS 160H
   - PHYS 260H
   - PHYS 262H

2. To be eligible for the Biology Honors Program, you must be a declared major in Biology and meet one of the following two criteria: 1) a GPA of 3.0 or better in 12 or more credits of math and science and GMU, including a grade of B or better in BIOL 213; or 2) a math/science GPA of 3.1 in transferred credits and a grade of B or better in BIOL 213.
3. MATH 113 and HNRS 125 both fulfill the quantitative reasoning requirement for the Honors Program. MATH 113 requires a placement exam. See the Math department for exam days and times. Biology requires another Math course chosen from MATH 114 or MATH 116 (MATH 114H), MATH 110, MATH 111, or BIOL 312. (If BIOL 312:Biostatistics is chosen, it may not be used as a biology elective.)
4. To graduate with honors in Biology, a student is required to maintain a minimum GPA of 3.000 in math and science and to earn a GPA of at least 3.5 in at least three semesters of BIOL 494 Honors Seminar. For more information contact the Biology advisor, Prof. Kocache.
5. Availability of 3 credit BIOL courses may require students to substitute 4 credit courses and thus graduate with more than 120 credits