

Sample Course Sequence for a B.S. in Marine Biology (124 h degree) (rev. Fall 2007)

Semester 1

BSC 110&L OR BSC 111&L	4 h
CHE 106&L	4 h
*Calculus Competency	3 h
two GEC classes	6 h
Total	17 h

Semester 2

BSC 111&L OR BSC 110&L	4 h
CHE 107&L	4 h
two GEC classes	6 h
one elective	3 h
Total	17 h

Semester 3

BSC 201&L	4 h
CHE 255&L	4 h
two GEC classes	6 h
one elective	3 h
Total	17 h

Semester 4

BSC 380&L	4 h
CHE 256&L	5 h
one GEC classes	3 h
one elective	3 h
Total	15 h

Semester 5

BSC Physiology course	3 h
BSC 370	4 h
PHY 111&L	4 h
two GEC classes	6 h
Total	17 h

Semester 6

BSC 445&L (WI)	4 h
BSC prerequisite for GCRL or an elective (300/400)	3 h
PHY 112&L	4 h
two electives	6 h
Total	17 h

Semester 7 (Summer)

**two Marine Biology courses taken at GCRL	
Total	10 h

Semester 8

BSC 497	1 h
electives to complete degree	13 h
Total	14 h

In the Sample Course Sequence above, “electives” may include the Speech Communication (SCM) course, introductory college math courses (MAT 101/MAT 101E, MAT 103, or MAT 128), courses toward a minor, additional courses in your major, and/or courses you might like to take because of your special interest in the topic.

NOTE: Many of these electives will need to be at the Junior or Senior level (300/400), in order to fulfill the requirement for 45 hours of upper level courses.

“Rules of thumb”:

- take ~16 hours of courses per semester to graduate in 8 semesters
- it is helpful to have completed Calculus prior to taking the Physics series
- it is helpful to have completed the Organic Chemistry series prior to taking BSC 370 [Genetics]
- it is helpful to have completed the Organic Chemistry series prior to taking BSC 360 [Cell Physiology]

During the last semester of the Sophomore year, students should construct a more **detailed plan for the Junior and Senior years**, because many upper level BSC courses are offered in specific semesters (Fall or Spring only) and/or on a rotating two-year cycle.

In order to graduate, you must:

- have a **final USM GPA of at least 2.0** in:
 - a. all courses attempted at USM
 - b. all Biological Sciences courses, and
 - c. all minor courses (if applicable)

NOTE: Grades from courses taken at other institutions are NOT included in calculation of USM GPA in these 3 areas.

- complete the **General Education Curriculum (GEC)**, which includes lower level core courses, including one Speech Communication (SCM) course and one Computing Competency course plus one upper level writing intensive (WI) course and a Senior capstone experience (see the Marine Biology Degree Plan for details)
- complete at least **45 hours of courses at the Junior or Senior level** (300 or 400)
- have a minimum of **124 hours of courses**, with at least **62 hours from a four-year college or university**; the **last 32 hours must be from USM**.
- complete the “**Calculus Competency***”

The Department of Mathematics recently changed prerequisites in relation to the requirement that all College of Science and Technology majors demonstrate competency in Calculus, which may be achieved in the following ways:

1. High School AP credit in Calculus accepted by the University (will appear on the transcript).
2. MAT 167 [Calculus I with Analytical Geometry]. Prerequisites are greater than or equal to 26 in Math on ACT or greater than or equal to C in MAT 128 [Precalculus Mathematics] or greater than or equal to C in MAT 103 [Plane Trigonometry].
3. MAT 314 [Calculus for the Arts and Sciences]. Prerequisites are greater than or equal to 24 in Math on ACT or greater than or equal to C in MAT 128 or greater than or equal to C in MAT 103.

NOTE: BSC recommends that our students enroll in MAT 314 to satisfy the calculus competency requirement, while encouraging students with interest in mathematics and computational biology to pursue more advanced coursework offered through the Department of Mathematics.

NOTE: Enrollment in MAT 103 or MAT 128 requires greater than or equal to 24 in Math on ACT or greater than or equal to C in MAT 101 [College Algebra].

NOTE: Enrollment in MAT 101 requires greater than or equal to 20 in Math on ACT or greater than or equal to C in MAT 099 [Intermediate Algebra].

- have at least **13 hours of “Marine Biology” elective courses ****, which include **10 hours from USM’s Gulf Coast Research Laboratory (GCRL)** in Ocean Springs.

NOTE: not every GCRL summer course can be used to fulfill the Marine Biology degree plan, but some may be taken as an elective instead. Students must carefully consult the Degree Plan for approved courses and they should contact Dr. Patricia M. Biesiot (BSC Marine Biology advisor, patricia.biesiot@usm.edu) or contact the Marine Biology advisor at USM Gulf Coast, if they have specific questions or concerns.

** GCRL courses are intensive 4-, 5- or 6-hour courses offered only in the summer semester. Because classes typically meet from ~8:00 AM – ~4:30 PM each week day, most students are in residence at GCRL; there are dormitory and dining hall facilities on the campus. There are two ~four-week summer terms and students may take only one course per term. The fast paced nature of these courses will not permit time to take an evening course at another institution or to work at a part time job during the week. Prerequisites for these classes typically include BSC 110&L [Principles of Biological Sciences I and Lab], BSC 111&L [Principles of Biological Sciences II and Lab], and BSC 201&L [General Zoology and Lab]. Check the prerequisites for each course because certain courses require BSC 226&L [General Botany and Lab] or BSC 445&L [Marine Biology and Lab] or 8 hours of chemistry or other specific classes.

Some students take the GCRL classes during both terms of one summer semester and others take classes during one term of two successive summer semesters. A few students take classes during two summer semesters; the additional classes count as electives. Students may take these classes during the summer semester between the Sophomore and Junior years, but only if they have completed the prerequisites. Students more typically take these courses during the summer semester between the Junior and Senior years OR the last summer of their Senior year.