

**Recommended Undergraduate Course Sequence for Marine Sciences, Bachelors of Science**

**BOLD lettering = CLAS or MARN program requirements; See plan of study check list**

**Freshman year**

**First semester (Fall)**

<u>Course</u>		<u>Credits</u>
<b>Introduction to Oceanography</b> .....	MARN 1002E/1003E	<b>3 /4</b>
<b>General Chemistry I</b> .....	CHEM 1127Q	<b>4</b>
<b>Pre-calculus or Calculus I</b> .....	MATH 1060Q or MATH 1131Q	<b>3 /4</b>
FYE (marine sciences freshman year experience – recommended) .....	UNIV 1820 or 1800	1
<b>“Freshman” English</b> (English Comp) .....	ENGL 1007	4
OR		
General Education/Content Area course.....	*consult schedule of courses	<u>3</u>
		14 – 16 total credits

**Second semester (Spring)**

<b>General Biology I</b> .....	BIOL 1107	4
<b>General Chemistry II</b> .....	CHEM 1128Q	4
<b>Calculus I or II</b> .....	MATH 1131Q or 1132Q	4
<b>Gen Ed or Freshman English</b> .....	ENGL 1007	<u>3 /4</u>
(ENGL 1007 only if not completed in fall)		15-16 total credits

**Sophomore Year**

**Fall semester**

<b>General Biology II</b> .....	BIOL 1108	4
<b>General Physics w/ Calculus</b> .....	PHYS 1401Q	4
OR		
<b>General Physics w/o Calculus</b>	PHYS 1201Q	4
<b>Calculus II</b> .....	MATH 1132Q **	4
<b>Content Area General Education</b> (such as ANTH, MUSI, DRAM)		3
Introduction to Scientific Diving ( <i>optional</i> ) .....	MARN 1160	2
<b>Related area</b> if Math sequence complete (such as Chemistry, Math, Ecology, Geography, etc. >2000 level) ***		<u>3-4</u>
		15-18 total credits

**Spring semester**

<b>Physics II</b> .....	PHYS 1402Q or PHYS 1202Q****	4
<b>Marine Sciences and Society</b> .....	MARN 2801WE	3
<b>Statistics</b> .....	STAT 1100Q	4
<b>Gen Ed</b> (such as macroeconomics) .....	ECON 1201	3
<b>and/or related area, and/or MARN elective</b>		<u>3-4</u>
		14-18 Total credits

\*See CLAS General Education Audit sheet. Content Area (CA) General Education (Gen Ed) courses must compose 1 each of CA1 A – D, 2 from CA 2, and 2 from CA 4, with at least one “international” from CA 4. Courses may satisfy more than one content area, such as ANTH 1000 but no more than one CA course may be used to satisfy CA 4. Total of 8 maximum required, 6 minimum courses if you “double dip”. The 2 courses required in Content Area 3 are already included in the MARN program requirements.

### Junior Year

#### Fall semester

<u>Course</u>		<u>Credits</u>
<b>Marine Sciences I</b>	MARN 3001	4
<b>MARN elective</b> group 1 Beaches/Coasts	MARN 3023	
Or group 2 such as Marine Invertebrates, Plankton Ecology, Marine Mammals	MARN 3012, 3017 or 3811	3
<b>Related area ***</b> (Environmental Law, Ecology, etc.)		3
<b>Content area Gen Ed</b>		3
And/Or		
Second related area or Independent Study		2-3
Scientific Diving (or intro to Sci. Div., both optional) MARN 1160 or 4160		<u>2-3</u>
		15 - 18 total credits

#### Spring semester

<b>Marine Sciences II</b>	MARN 3002	3
<b>Marine Sci Q course</b>	MARN 4202Q or 4210Q	3-4
<b>MARN elective(s)</b> group 1 or 2	MARN 3014, 3000E, 3812, 4018	3
Related area		3
Content area Gen Ed *		<u>3</u>
		15 - 16 total credits

### Senior Year

#### Fall semester

<b>Measurement &amp; Analysis Coastal Ecosystems</b>	MARN 4001	4
MARN elective group 1 physical oceanography	MARN 4060	3
Or other courses listed above in junior fall year		
General Education (s) (if still needed)		3
Related area (s) (if still needed)		3 -6
Scientific Diving (optional)		3 -6
Independent study (optional)		<u>1-3</u>
		15-18 total credits

#### Spring semester

CAPTSONE: Science and the Coastal Environment.....MARN 4002		3
Remaining MARN electives including Q courses and areas 1 or 2		3
Gen Ed (any remaining)		3
AND/OR		
Related area (any remaining)		3
Independent Study/Senior Thesis (optional) ...MARN 3899/MARN 4896W		<u>3</u>
		12-15 Total credits

\*\* If Math sequence is completed, use the opportunity to take a related area class or scientific diving.

\*\*\* Related areas must be  $\geq 2000$  and include Ecology and Evolutionary Biology (EEB), Organic Chemistry (CHEM), Economics of the Oceans (ECON), Maritime studies (MAST), Geography (GEOG), Maritime Law (POLS) and others.

\*\*\*\* Physics must be taken in sequence: 1401/1402 or 1201/1202. May not take 1402 after 1201.