## OEAS COURSES BY SEMESTER

### PHYSICAL OCEANOGRAPHY EMPHASIS

(with Math courses for Math Minor)

Must have 120 credits to graduate

### FRESHMAN YEAR: FALL (15 Hours)
- Math 211 - Calculus I 4 cr
- Engl 110 - English Composition 3 cr
- Chem 121/122 - Foundations of Chemistry 4 cr
- OEAS 111 - Physical Geology 4 cr

### FRESHMAN YEAR: SPRING (14 Hours)
- Math 212 - Calculus II 4 cr
- Interpreting the Past 3 cr
- Chem 123/124 - Foundations of Chemistry 4 cr
- CS 121G 3 cr

### SOPHOMORE YEAR: FALL (14 Hours)
- Biol 115 - General Biology 4 cr
- Phys 231 - University Physics 4 cr
- Math 312 - Calculus III 3 cr
- Engl 112L - Perspective Literature 3 cr

### SOPHOMORE YEAR: SPRING (17 Hours)
- Human Behavior GenEd 3 cr
- Phys 232 - University Physics 4 cr
- Biol 116 - General Biology 4 cr
- Math 316 - Intro to Linear Algebra 3 cr
- OEAS 306 - Oceanography 3 cr

### JUNIOR YEAR: FALL (15 Hours)
- Math 307 - Ordinary Differential Equations 3 cr
- Phys 319 - Analytical Mechanics 3 cr
- OEAS 405 - Physical Oceanography 3 cr
- Human Creativity GenEd 3 cr
- OEAS 310 - Global Earth Systems 3 cr

### JUNIOR YEAR: SPRING (13 Hours)
- OEAS 451 - Data Collection & Analysis 3 cr
- ME 205 3 cr
- Stat 310U - Probability & Statistics 3 cr
- OEAS 495 - Matlab 1 cr
- Math 317 - Calculus IV 3 cr

### SENIOR YEAR: FALL (16 Hours)
- OEAS 441 - OEAS Field Study I 3 cr
- ME 311 & ME 303 6 cr
- Math 401 - Partial Differential Equations 3 cr
- Stat 437 - Regression and Analysis Variations 3 cr
- ME 305 1 cr

### SENIOR YEAR: SPRING (15 Hours)
- OEAS 442 - OEAS Field Study II 3 cr
- Geog 402 or 404 3 cr
- OEAS 415 - Waves & Tides 3 cr
- Philosophy & Ethics 3 cr
- Impact Technology 3 cr

### Notes on Math/Stat Classes:
- MATH 211, 212 are required of all oceanography majors. MATH 307, STAT 330 and 437 are required for the Physical Oceanography Emphasis. MATH 312 is required for ME 303.

### Notes regarding ME courses:
- ME 303 requires ME 205, MATH 307, MATH 312. ME 311 requires MATH 312 pre-requisite and ME 305.

### Minor Declaration and Requirements:
- Students are encouraged to declare their minor prior to their junior year.
- Students in Physical Oceanography can get a Math minor by taking MATH 317. Refer to catalog for Minor requirements (12 cr) in Biochemistry, Biology, Chemistry, Computer Science, Geology, Mathematics, Physics, Geography/GIS, Environmental Health.

- Option D In lieu of minor, 2 classes at the 300/400 level outside the College of Sciences. Prerequisites may be required.