

Name: \_\_\_\_\_

Date: \_\_\_\_\_

ID#: \_\_\_\_\_

(Quarter offered: F=Fall, W=Winter, S=Spring, (-) = Not offered this year)

NOTES: Courses appearing in more than one category can fulfill only one requirement

All courses on check list **MUST** be taken for a letter grade.

**INTRODUCTORY REQUIREMENTS**

**Calculus:** MATH 11A (FWS) \_\_\_ + 11B (FWS) \_\_\_  
**OR** MATH 19A (FWS) \_\_\_ + 19B (FWS) \_\_\_

**General Chemistry:** CHEM 1A (FWS) \_\_\_ + 1B (FWS) \_\_\_ + 1C/N (FWS) \_\_\_

**Biology:** BIOL 20A (FWS) \_\_\_ + BIOE 20B (FWS) \_\_\_ + BIOE 20C (FWS) \_\_\_

**Physics:** PHYS 6A/L (FWS) \_\_\_ + 6B (WS) \_\_\_ **OR** PHYS 6A/L (FWS) \_\_\_ + 6C (FS) \_\_\_

**Biostatistics:** AMS 7/L (FWS) \_\_\_

**ADVANCED REQUIREMENTS** (11 total including 2 lab/field courses: \_\_\_\_\_ )

**Genetics:** BIOL 105 (FWS) \_\_\_

**Ecology:** BIOE 107 Ecology (WS) \_\_\_

**Evolution:** BIOE 109 Evolution (FWS) \_\_\_

**Plant Physiology:** ONE from the following...  
 BIOE 135/L Plant Physiology (W) \_\_\_  
 \*ENVS 162 Plant Physiological Ecology \_\_\_

**Botany:** One from the following...  
 BIOE 117/L Systematic Botany (W) \_\_\_  
 BIOE 120/L Marine Botany (S) \_\_\_

<p>Major Qualification Policy:</p> <ol style="list-style-type: none"> <li>1) CHEM 1A</li> <li>2) CHEM 1B</li> <li>3) BIOL 20A</li> <li>4) BIOE 20B</li> <li>5) BIOE 20C</li> </ol> <p>Must complete all six courses with a "C" or better; no more than 1 non-passing grade in the first 5 qual courses is accepted.</p> <ol style="list-style-type: none"> <li>6) MATH 11A or MATH 19A</li> </ol>
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**Topical Electives:** THREE from the following...

- BIOE 117/L Systematic Botany (W) \_\_\_
- BIOE 118 Plants and Society (S) \_\_\_
- BIOE 120/L Marine Botany (S) \_\_\_
- BIOE 135/L Plant Physiology (W) \_\_\_
- BIOE 137/L Molecular Ecology (W) \_\_\_
- BIOE 145 Plant Ecology (F) \_\_\_
- BIOE 145L Field Methods in Plant Ecology (-) \_\_\_
- BIOE 148 Quantitative Ecology (F) \_\_\_
- BIOE 149 Disease Ecology (-) \_\_\_
- BIOE 188 Intro to Science Writing (-) \_\_\_
- BIOL 100 Biochemistry (FW) \_\_\_
- BIOL 101/L Molecular Biology (WS)
- BIOL 110 Cell Biology (FS) \_\_\_

- BIOL 115 Eukaryotic Molecular Biology (W) \_\_\_
- \*ENVS 104A/L Intro to Environmental Field Methods \_\_\_
- \*ENVS 129 Integrated Pest Management \_\_\_
- \*ENVS 130A/L Agroecology & Sustainable Agriculture \_\_\_
- \*ENVS 130B Principles of Sustainable Agriculture \_\_\_
- \*ENVS 131 Insect Ecology \_\_\_
- \*ENVS 160 Restoration Ecology \_\_\_
- \*ENVS 161A Soils & Plant Nutrition \_\_\_
- \*ENVS 162 Plant Physiological Ecology \_\_\_
- \*ENVS 163 Plant Disease Ecology \_\_\_
- \*Permission of instructor required to enroll in ENVS courses

Field Quarter:

- \_\_\_ BIOE 151ABCD Ecology & Conservation in Practice (S16)\*\*
- \_\_\_ ENVS 107ABC Natural History Field Quarter (S16)\*\*
- \*\*See course equivalencies on reverse

**THREE additional EEB General Electives:** \_\_\_\_\_

**Disciplinary Communication:** Successful completion of BIOE 107 Ecology and Bioe 109 Evolution (Note: DC courses must be completed at UCSC.)

**COMPREHENSIVE REQUIREMENT** (Senior Exit Requirement): \_\_\_\_\_

For more information see: <http://undergrad.pbsci.ucsc.edu/eeb/completing-the-major/senior-exit.html>



## Ecology & Evolutionary Biology GENERAL ELECTIVES

2015-16

(Quarter offered: F=Fall, W=Winter, S=Spring, (-) = Not offered this year)

NOTE: Courses appearing in more than one category can fulfill only one requirement.

BIOE 107 Ecology [Marine Biology only] (WS) ____	BIOL 110 Cell Biology (FS) ____
BIOE 108 Marine Ecology (W) ____	BIOL 115 Eukaryotic Molecular Biology (W) ____
BIOE 112/L Ornithology (F15) ____	BIOL 120 Developmental Biology (W) ____
BIOE 114/L Herpetology (S16) ____	CHEM 108A Organic Chemistry (FW) ____
BIOE 117/L Systematic Botany of Flowering Plants (W) ____	CHEM 108B Organic Chemistry (WS) ____
BIOE 118 Plants and Society (S) ____	EART 100/L Vertebrate Paleontology (W) ____
BIOE 120/L Marine Botany (S) ____	EART 101/L Invertebrate Paleobiology (F) ____
BIOE 122/L Invertebrates (W) ____	EART 102 Marine Geology (W) ____
BIOE 124/L Mammalogy (F) ____	EART 105 Coastal Geology (W) ____
BIOE 127/L Ichthyology (F15) ____	ECON 166A Game Theory and Applications I ____
BIOE 128L Large Marine Vertebrates Field (S) ____	ECON 166B Game Theory and Applications II ____
BIOE 129/L Biology of Marine Mammals (lab optional) (S) ____	*ENVS 104A/L Intro to Environmental Field Methods ____
BIOE 131/L Animal Physiology (lab optional) (W) ____	*ENVS 108 General Entomology ____
BIOE 133/L Exercise Physiology (S16) ____	*ENVS 115A/L GIS & Environmental Applications ____
BIOE 134/L Comparative Vertebrate Anatomy (F) ____	*ENVS 120 Conservation Biology ____
BIOE 135/L Plant Physiology (W) ____	*ENVS 122 Tropical Ecology & Conservation ____
BIOE 137/L Molecular Ecology (W) ____	*ENVS 123 Animal Ecology & Conservation ____
BIOE 140 Behavioral Ecology (F) ____	*ENVS 129 Integrated Pest Management ____
BIOE 141L Behavioral Ecology Field Course (W17) ____	*ENVS 130A/L Agroecology & Sustainable Agriculture ____
BIOE 145 Plant Ecology (F) ____	*ENVS 130B Principles of Sustainable Agriculture ____
BIOE 145L Field Methods Plant Ecology (-) ____	*ENVS 131 Insect Ecology ____
BIOE 147 Community Ecology (S) ____	*ENVS 160 Restoration Ecology ____
BIOE 148 Quantitative Ecology (F) ____	*ENVS 161A Soils & Plant Nutrition ____
BIOE 149 Disease Ecology (-) ____	*ENVS 162 Plant Physiological Ecology ____
BIOE 150 Ecological Field Methods (S17) ____	*ENVS 163 Plant Disease Ecology ____
BIOE 150L Ecological Field Methods Lab (S17) ____	*ENVS 167 Freshwater & Wetland Ecology ____
BIOE 155 Freshwater Ecology (FW) ____	*ENVS 168 Biochemistry & the Global Environment ____
BIOE 155L Freshwater Ecology Lab (S) ____	METX 119 Microbiology (FS) ____
BIOE 158L Marine Ecology Lab (S16) ____	METX 119L Microbiology Lab (FWS) ____
BIOE 161 Kelp Forest Ecology (F15) ____	OCEA 118 Marine Microbial Ecology (S) ____
BIOE 161L Kelp Forest Ecology Lab (F15) ____	OCEA 130 Biological Oceanography (S) ____
BIOE 163/L Ecology of Reefs, Mangroves & Seagrasses (-) ____	PSYC 123 Behavioral Neuroscience ____
BIOE 165 Marine Conservation Biology (F) ____	
BIOE 172/L Population Genetics (F16) ____	
BIOE 188 Intro to Science Writing (-) ____	
BIOL 100 Biochemistry (FW) ____	
BIOL 101/L Molecular Biology (WS) ____	

\*Permission of instructor is required to enroll in ENVS courses; be sure to check timing of offerings

### Field Quarter Equivalencies:

\_\_\_\_ BIOE 151ABCD Ecology & Conservation in Practice (S16) = BIOE 150 + 150L + 1 EEB general elective

\_\_\_\_ BIOE 159ABCD Marine Ecology Field Quarter (F16) = BIOE 127/L + BIOE 108 + BIOE 158L

\_\_\_\_ ENVS 107ABC Natural History Field Quarter (S16) = Topical Elective (5 units) + EEB General Elective (5 units)

### One of the following may also be used as an upper-division general elective:

BIOE 183W Undergraduate Research in EEB (2 units) (FWS) \_\_\_\_ + BIOE 183L, 193, or 195 (minimum 3 units) (FWS) \_\_\_\_

ENVS 183 Environmental Studies Internship (5 unit) \_\_\_\_