



DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY  
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December 13, 2013

To: Joseph Nagy, Chair  
 General Education Governance Committee

From: Peggy Fong, Vice Chair for Undergraduate Studies  
 Department of Ecology and Evolutionary Biology

Re: Change of GE Category for Ecology and Evolutionary Biology 25 – Living Ocean

Dear Dr. Nagy:

The Department of Ecology and Evolutionary Biology (EE BIOL) proposes to change the general education category for Ecology and Evolutionary Biology 25 – Living Ocean, effective Spring 2014. Presently, EE BIOL 25 fulfills one of the requirements for the Foundations of Scientific Inquiry: Life Sciences. The Department would like EE BIOL 25 to be included under the Life Sciences – Laboratory/Demonstration category.

The Department reviewed the course syllabi for other courses included under the Life Sciences – Laboratory/Demonstration category. We found that the activities and projects that are part of EE BIOL 25 are similar to these other courses.

In this course, students participate in a number of activities whose purpose is to develop their ability to understand, interpret, and discuss scientific primary literature and to learn about the scientific method. Some of these activities include at least one field trip (tidepooling expedition at a local intertidal habitat, visit to a local aquarium, observe an education program at Heal the Bay by shadowing an educator for the marine science outreach program, among others), and writing exercises that assist in developing critical and analytical reading and writing skills.

Included in this packet you will find a course syllabus, lecture schedule, course reading list, and the GE Course Information Sheet. A course action form has already been submitted to the Faculty Executive Committee.

Thank you in advance for your consideration of this proposal. If you have any further questions, please contact Dr. Peggy Fong at x55444 (pfong@biology.ucla.edu) or Jessica Angus at x51680 (jangus@lifesci.ucla.edu).

Sincerely,

A handwritten signature in black ink that reads "Peggy Fong".

Peggy Fong  
 Vice Chair Undergraduate Studies

**General Education Course Information Sheet**  
**Please submit this sheet for each proposed course**

Department & Course Number Ecology and Evolutionary Biology 25  
 Course Title Living Ocean  
 Indicate if Seminar and/or Writing II course \_\_\_\_\_

1. Check the recommended GE foundation area(s) and subgroups(s) for this course

**Foundations of the Arts and Humanities**

- Literary and Cultural Analysis \_\_\_\_\_
- Philosophic and Linguistic Analysis \_\_\_\_\_
- Visual and Performance Arts Analysis and Practice \_\_\_\_\_

**Foundations of Society and Culture**

- Historical Analysis \_\_\_\_\_
- Social Analysis \_\_\_\_\_

**Foundations of Scientific Inquiry**

- Physical Science \_\_\_\_\_  
*With Laboratory or Demonstration Component must be 5 units (or more)*
- Life Science X  
*With Laboratory or Demonstration Component must be 5 units (or more)* X

2. Briefly describe the rationale for assignment to foundation area(s) and subgroup(s) chosen.

This course will study the physical and chemical characteristics of the ocean environment with a major focus on discussing current issues facing our oceans including, but not limited, to issues of climate change, off-shore oil drilling, plastic and chemical pollution, overfishing, and fresh water shortages. Students will be required to attend at least one field trip where they will have the opportunity for hands-on experience with marine biology.

3. List faculty member(s) who will serve as instructor (give academic rank):

Laura K. Jordan (Lecturer)

Do you intend to use graduate student instructors (TAs) in this course? Yes X No \_\_\_\_\_  
 If yes, please indicate the number of TAs \_\_\_\_\_ 2

4. Indicate when do you anticipate teaching this course over the next three years:

|           |                       |                         |                         |                         |
|-----------|-----------------------|-------------------------|-------------------------|-------------------------|
| 2012-2013 | Fall Enrollment _____ | Winter Enrollment _____ | <u>X</u><br>80 (+ 8 WL) | Spring Enrollment _____ |
| 2013-2014 | Fall Enrollment _____ | Winter Enrollment _____ | <u>X</u><br>80 (+ 8 WL) | Spring Enrollment _____ |
| 2014-2015 | Fall Enrollment _____ | Winter Enrollment _____ | <u>X</u><br>80 (+ 8 WL) | Spring Enrollment _____ |

5. GE Course Units

Is this an **existing** course that has been modified for inclusion in the new GE? Yes X No \_\_\_\_\_

If yes, provide a brief explanation of what has changed. The department is requesting that the GE classification be changed from Life Sciences to Life Sciences + Lab/Demo. After reviewing lab activities of other courses within the Life Sciences + Lab/Demo category, the department determined that the nature of the activities in EE BIOL 25 justifies this change.

Present Number of Units: 5 Proposed Number of Units: 5 (no change)  
 6. Please present concise arguments for the GE principles applicable to this course.

- General Knowledge

This course is designed for non-majors and covers an overview of the broad disciplines of science that are included under the term “Marine Biology, including the physical and chemical characteristics of the ocean environment.
- Integrative Learning

There is a field trip requirement for this course. Numerous options are available for students to fulfill this requirement, including a tidepooling expedition at an intertidal habitat, shadowing educators in a marine science outreach program, a visit to a local aquarium, among others.
- Ethical Implications

A major focus of the course will be to discuss and understand current issues facing our oceans, including the effect of current and future population growth on the state of the oceans, as well as the effects of overfishing, climate change, and other issues, and the implications for future generations.
- Cultural Diversity

Topics covered in this course include ocean and culture, the study of the diversity of marine life, and how the industrial practices in different countries affect the ocean.
- Critical Thinking

The course would provide students with the ability to understand, interpret, and discuss scientific primary literature as well as an appreciation of the scientific method, and new perspectives on the living ocean and society.
- Rhetorical Effectiveness

The nature of the assignments will give students the opportunity to learn how to craft a sound argument (Debate Position Statement) and how to write articles as a scientific journalist (Scientific Writing Exercise).
- Problem-solving

Class exercises, such as an in-class scavenger hunt, will teach students how to develop their problem-solving skills. It is expected that at the end of this course, students will be able to identify the various species that inhabit the ocean, and to make educated decisions and observations on ocean and environmental issues.
- Library & Information Literacy

A number of the assignments require that students review the current scientific literature as well as media sources found online or in print publications (newspapers, magazines) that discuss findings from primary research resources.

**(A) STUDENT CONTACT PER WEEK (if not applicable write N/A)**

- 1. Lecture: 3 (hours)
- 2. Discussion Section: 1 (hours)
- 3. Labs: \_\_\_\_\_ (hours)
- 4. Experiential (service learning, internships, other): \_\_\_\_\_ (hours)
- 5. Field Trips: 3 (hours)

**(A) TOTAL Student Contact Per Week** 7 **(HOURS)**

**(B) OUT-OF-CLASS HOURS PER WEEK (if not applicable write N/A)**

- 1. General Review & Preparation: \_\_\_\_\_ (hours)
- 2. Reading: 2 (hours)

- |                                     |                   |         |
|-------------------------------------|-------------------|---------|
| 3. Group Projects:                  | <u>1</u>          | (hours) |
| 4. Preparation for Quizzes & Exams: | <u>          </u> | (hours) |
| 5. Information Literacy Exercises:  | <u>1</u>          | (hours) |
| 6. Written Assignments:             | <u>3</u>          | (hours) |
| 7. Research Activity:               | <u>2</u>          | (hours) |

**(B) TOTAL Out-of-class time per week**

|          |                |
|----------|----------------|
| <b>9</b> | <b>(HOURS)</b> |
|----------|----------------|

**GRAND TOTAL (A) + (B) must equal at least 15 hours/week**

|           |                |
|-----------|----------------|
| <b>16</b> | <b>(HOURS)</b> |
|-----------|----------------|

**Ecology and Evolutionary Biology 25**

Marine Biology: Living Ocean

Winter Quarter 2012 – Dr. Laura K. Jordan

**Course Description**

Have you ever wondered what it would be like to be a marine biologist? Do you love spending time on or in the ocean and want to learn more about it? Could you sit and stare at fish swimming around in an aquarium for hours? Have you ever wondered how sharks can detect electric fields or why penguins wear what looks like a tuxedo? If you identify with any of these questions you have come to the right place! The ocean is a fascinating part of our world, and while it dominates the surface of our planet, there are still so many secrets to be discovered. In this class we will cover an overview of the broad disciplines of science that are included under the term “Marine Biology,” including physical and chemical characteristics of the ocean environment so we can understand more about the critters that make it their home. A major focus of this class will be to discuss and understand current issues facing our oceans. As the human population surpasses 7 billion, most of which live on or near coastlines, issues of climate change, off-shore oil drilling, plastic and chemical pollution, overfishing, and fresh water shortages, are just a few of the ocean-related topics where major decisions must be made during our lifetimes and will affect future generations.

This course is a lower-division non-majors course that offers GE credit in the life sciences. As a GE course, this class assumes no prior college-level experience in the sciences but does expect that you have had at least one life sciences course in the last few years of secondary school.

As a part of this class you will attend lectures and participate in discussion sessions. In addition to weekly reading and section assignments you will complete one midterm exam and one final exam. To get a real taste of marine biology you will also participate in at least one field trip.

**After this Class**

You will know that whales are *not* fish, that the ocean and its inhabitants *are* a finite resource, and most of all, you will be better prepared to evaluate literature and media presentations to make educated decisions on issues affecting the ocean. Your diligence and efforts in this class should provide you with many skills including the ability to understand, interpret, and discuss scientific primary literature, an appreciation of the scientific method, and new perspectives on the living ocean and society. Of course you’ll also have an arsenal of fun marine bio facts! Remember, the more you put in, the more you’ll come away with. Enjoy!

**Class Meeting Times and Office Hours**

Lectures (Dodd 161): Mondays and Wednesdays 2:00 to 3:15

Discussions (Life Sciences 1315) Tuesdays 10:00 to 10:50, or 1:00 to 1:50,  
or Wednesdays 10:00 to 10:50, or 11:00 to 11:50

Office Hours: Dr. Jordan Mondays 3:30 to 4:30 PM and Wednesdays 3:30 to 4:30  
Life Sciences 3326, ljordan@ucla.edu  
Chris Chabot Wednesdays 9-10, 12-1, LS 1315, c.l.chabot@ucla.edu  
Asif Razee Tuesdays 11-1, LS 1315, asifraze@ucla.edu

**Course Requirements:**

*Participation:* The success of this class relies on participation and discussion from all class members during discussion sections. *Your* success in this class requires that you attend all class sessions prepared to discuss the day’s topic and participate in class activities. Constructive participation and preparation prior to class sessions will therefore make up an important component of your evaluation in addition to timely completion of all assignments. If verbal participation does not come easily to you please speak with me or your TA outside of the class so we can explore ways to enhance your comfort speaking in the classroom. Absence from class will result in a loss of participation points and late assignments will lose 1/3 credit (see “policies,” any emergencies will be assessed if they arise). While attendance will not be recorded in lectures, the information overlaps highly with that of discussion sections and will be the primary source of content for exams.

*Reading:* Reading assignments will be from the required text book, *Marine Biology*, and from selected scientific papers and articles. Reading assignments may approach 100 pages per week so be sure to plan time to complete reading and other

assignments. I have chosen a textbook that is very approachable, however it does cover a vast amount of information. Your reading assignments highlight information I think will be particularly interesting, important, and useful. Research has indicated that reading before class can improve your comprehension of the material and identify questions and areas of confusion. Questions can be asked in class, office hours or posted on the class discussion board. You are also welcome and encouraged to read additional materials that have not been assigned whenever you can make the time. Each chapter in the book concludes with a list of several resources for additional information.

*Communication:* Office hours are an excellent time for you to address any difficulties you are having with the class, check in on your progress, or to explore ideas about anything that comes up regarding the class. I welcome each of you to come by as often as you like and strongly encourage you to come at least once during the quarter to discuss your thoughts and progress. Groups for the Climate Change Research Presentation are required to check in with your TA during their office hours to ensure you are on the right track before the presentation. If you cannot make it to any scheduled office hours please let me and/or your TA know and we will be happy to work out another time by appointment.

### **LAB/DEMO: Field Trip Requirement**

Field Trip Choices: Attendance for at least one field trip is required, however, you are encouraged to attend more than one of these fantastic excursions:

1. Tidepooling expedition: We will meet at White Point, Palos Verdes, a local rocky intertidal habitat, for exploration at low tide. Scheduled for 12:30pm on Feb 25<sup>th</sup>.
2. Aquarium visit: Join us for a behind the scenes aquarium tour of Cabrillo Marine Aquarium (San Pedro) or the Aquarium of the Pacific (Long Beach). Other great aquariums in CA include Monterey Bay Aquarium (Monterey), or Scripps Birch Aquarium (La Jolla). It may also be possible to arrange a trip to one of these. You will have a chance to talk to an aquarist and see the aquarium from new perspectives. Cabrillo: Jan 28<sup>th</sup> time TBA; Aquarium of the Pacific: Feb 23 TBA
3. Observe an educational program at the Santa Monica Pier aquarium, Heal the Bay. Shadow educators for the marine science outreach program while they expose local primary and/or secondary school groups to marine environmental and biological science. Arrange via TA
4. Tour of the Natural History Museum. Get the chance to tour a museum's collections rooms (not open to the public) with a working museum marine biologist. Thurs or Fri of week 5 or 6, TBA

**Schedule of Topics for Lectures and Sections, Assigned Readings, and Exam Dates**

| Week | Lecture Date | Topic   | Textbook Reading Due | Other Reading |
|------|--------------|---|----------------------|---------------|
| 1    | 1/9          | Introduction to study of marine biology and ocean habitat         | Ch. 1                |               |
|      | 1/11         | Physical/Chemical/Biological Oceanography                         | Ch. 2 & 3            |               |
| 2    | 1/16         | Martin Luther King Day- No class!                                 |                      |               |
|      | 1/18         | Study of Life   | Ch. 4 & Ch 5         |               |
| 3    | 1/23         | Primary Producers   | Ch. 6                |               |
|      | 1/25         | Spineless but Spectacular: Invertebrates I                        | Ch. 7                |               |
| 4    | 1/30         | Spineless but Spectacular: Invertebrates II                       |                      | TBA           |
|      | 2/1          | The Wonderful World of the Fishes I                               | Ch. 8                |               |
| 5    | 2/6          | The Wonderful World of the Fishes II                              |                      | TBA           |
|      | 2/8          | The rest of our Scaled, Furred and Feathered Marine Friends       | Ch. 9                |               |
| 6    | 2/13         | Midterm Exam  |                      | Review        |
|      | 2/15         | Challenges of Ocean Life: Sensory, navigation, locomotion, diving | Ch. 15               | TBA           |
| 7    | 2/20         | Happy Presidents Day- No class!                                   |                      |               |
|      | 2/22         | Marine Ecology: Our Changing Planet                               | Ch. 10 & p. 231-243  |               |
| 8    | 2/27         | Ecosystems: Intertidal & Estuaries                                | Ch. 11 & 12          |               |
|      | 2/29         | Ecosystems: Coastal Seas, Life on the Shelf                       | Ch. 13               |               |
| 9    | 3/5          | Ecosystems: Coral Reefs   | Ch. 14               |               |
|      | 3/7          | Ecosystems: Secrets of the Deep                                   | Ch. 16               |               |
| 10   | 3/12         | Marine Conservation: Fisheries                                    | Ch. 17 & 18          |               |
|      | 3/14         | Marine Conservation: Pollution                                    | Ch. 19               | Review        |

**Exams**

One midterm exam will be administered during the course. This exam will be given in place of a lecture on February 13. The exam will cover all topics discussed in the lectures AND their associated reading. The final exam is scheduled for Monday, March 19th from 11:30AM-2:30PM. The final exam will be cumulative, that is it will include material from all 10 weeks of the class, however, it will be focused primarily on material covered during the second half of the class (material not included on the midterm). These exams will include identifications of relevant terms and concepts, short answer questions that require more than simple memorization, including comprehensive integration of course concepts. Exams will be graded in a timely fashion and will be returned to you in your sections. All course grades will be posted on the web and can be accessed through the MyUCLA website.

**Textbook and Materials**

Required texts: Castro, P. and M.E. Huber. *Marine Biology*, 8<sup>th</sup> edition, 2010. McGraw Hill.

Additional reading: PDFs will be posted on the website or distributed by TAs

**Discussion Section and Lab/Demo topics, activities and assignments**

| Week | Topic  | Activities                                   | Reading                   | Assignments due                           |
|------|--|--|---------------------------|---|
| 1    | Ocean and culture  | Discussion, plate tectonics                  | Review Ch. 1-3            | Find your section!<br>Form Climate Groups |
|      | LAB/DEMO   | Water density activities                     |                           |   |
| 2    | Diversity of marine life:<br>Primary producers                                       | Discussion                                   | Review Ch. 4-6            | SWA if choose week 2                      |
|      | LAB/DEMO   | Stations- live/preserved<br>(scavenger hunt) |                           |   |
| 3    | Diversity of marine life:<br>Invertebrates   | Discussion                                   | Review Ch. 7              | SWA if choose week 3                      |
|      | LAB/DEMO   | Stations- live/preserved<br>(scavenger hunt) |                           |   |
| 4    | Diversity of marine life:<br>Fishes  | Take home quiz                               | Review Ch. 8              | SWE if choose week 4                      |
|      | LAB/DEMO   | Stations- live/preserved                     |                           |   |
| 5    | Diversity of marine life:<br>Other vertebrates                                       | Discussion                                   | Review Ch. 9              | Take home quiz                            |
|      | LAB/DEMO   | Stations- live/preserved                     |                           |   |
| 6    | Sharks in the wake of<br>Jaws, finning and cage<br>diving                            | Discussion                                   | Media Analysis<br>handout | Shark media analysis                      |
|      | LAB/DEMO   | Media study                                  |                           |   |
| 7    | Climate change and the<br>global population  | Discussion                                   |                           | Climate Change<br>Research Presentation   |
|      | LAB/DEMO   | Short presentations                          |                           |   |
| 8    | Chemical Pollution:<br>Antidepressants to<br>offshore oil drilling and<br>dead zones | Debate                                       |                           | Debate position<br>statement              |
|      | LAB/DEMO   | Bioaccumulation activity                     |                           |   |
| 9    | Physical Pollution: The<br>great garbage patch                                       | Discussion                                   | TBA                       | SWE if choose week 9                      |
|      | LAB/DEMO   | Movie  |                           |   |
| 10   | Overfishing and the<br>global population   | Discussion                                   |                           | Sustainable Seafood<br>Comparison         |
|      | LAB/DEMO   | Sustainable seafood<br>comparison activity   |                           |   |

**Descriptions of Assignments:**

*Scientific Writing Analysis (SWA) 50 pts*

Due EITHER week 2 or 3. For this analysis, you will choose an article published in the media (online/newspaper/magazine), that discusses findings of a primary research paper related to that week’s discussion section (primary producers a.k.a. phytoplankton or algae- week 2 or invertebrates-week 3). You must obtain a copy of the original study (primary literature) that the article discusses. Write a short summary (one paragraph, 150-200 words) of each. In the summary, be sure to identify the main goal of the author(s). For the final paragraph (300-400 words) you will compare the two to discuss how well the media article portrays the actual study that was published. Does the media article contain any inaccuracies from the original study? Are there differences in tone or conclusions between the two? How does the media article inspire interest in the topic? Is the media article a valuable representation that provides a more accessible interpretation of the original study? How could it be improved? Turn in a copy of both articles with your writing assignment.

*Scientific Writing Exercise (SWE) 50 pts*

Due EITHER week 4 or 9. Now it’s your turn to be the reporter! Choose a scientific article from the primary literature on a topic related to that week’s discussion section (fishes-4, pollution- week 9). Your challenge is to interpret the original study for the general public audience in a way that could get it published in your favorite magazine/news source. That means it needs to



capture your audience’s attention and provide interesting information and perspectives, but it also must stay true to the findings and conclusions of the original article’s author(s). Have fun with this one and be creative!

*Shark Media Analysis (50 pts)*

Choose an example of recent/current media where sharks are the star. Choose one of the following forms of media: film, book (adult or children–choose at least 2), TV series/special, or a selection of 3 written articles or 3 YouTube videos focused on sharks. Write a one paragraph summary (200 words) of the media example you chose. Then write a one paragraph response to how the movie/book/show/articles made you feel and think about sharks (150-200 words). In the third paragraph discuss how and why it elicited that response in you (300-400 words). For example, how are sharks portrayed? Is the representation of sharks on the cover/title consistent with how they are portrayed throughout? What stylistic tactics (cinematography, music, language) are used to elicit certain responses in viewers/readers? Does the movie/book/show/articles contain misguided or incorrect information about sharks? If so, why might the creators have chosen to provide inaccuracies and how might that be dangerous?

*Climate Change Research Presentation*

With a small group (4-6 people) you will summarize current knowledge of a major topic related to climate change. Topics: CO<sub>2</sub> (greenhouse effect, carbon sources, cycling and sequestration), global temperature patterns (geologic timescale to present), coral bleaching and ocean acidity, rising sea level (glacier and ice cap melting, ocean circulation), impact on weather patterns (droughts, storms). *Written assignment (4-5 pages):* For each you will outline an estimate of the number of scientific studies that you found addressing this topic using library resources (Web of Science, Biosis). Describe what different types of research have been done to acquire data on this topic. Summarize the major findings of at least 3 recent studies. Are the results consistent across studies? How do they tie in to the big picture of global climate change? Why is understanding this aspect of global climate change important? What, if any, steps can be taken to minimize damages associated with your topic? Provide all appropriate citations for information. *Presentation:* One group member will provide a short, 5 minute, powerpoint presentation on your topic, describing how it is studied, and outlining important recent research findings. The remaining topics in the written assignment will be addressed in the discussion following the presentations.

*Debate Position Statement (50 pts)*

You will be assigned a debate position in class during week 7. For this assignment you will research your position and write a statement summarizing your position citing evidence to support your statements (300-400 words). In a final paragraph (200 words), state whether you agree or disagree with your assigned position and provide evidence for your statements with appropriate citations.

*Sustainable Seafood Comparison (50 pts)*

Visit the 5 major websites/apps designed to help people make smarter choices when consuming seafood. Choose 5 species you are advised not to purchase and explain why you should avoid. Look for any discrepancies in advice between the different organizations and describe these. Finally, decide which you think is the most reliable/contains the most useful and accurate information and why you chose it.

*Scavenger Hunts and Take Home Quiz*

Two scavenger hunt activities (25 pts each) will take place during your discussion sections to help you discover the diversity of life in the ocean. After the diversity of life exploration of fishes, you will complete a take home quiz (50 pts) provided by your TA reviewing information from all three diversity of life sections you have completed. You are allowed to use all resources available to you including those provided through the UC library system, however, you may *not* use another person to help you complete your quiz. If you have taken careful notes during section, those will be your best resource.

**Grading**

|   |             |
|---|-------------|
| Midterm                                   | 200         |
| Section Assignments (see breakdown above) | 350         |
| Climate Change Research Presentation      | 100         |
| Final exam                                | 300         |
| Participation/attendance                  | 50          |
| <b>Total</b>                              | <b>1000</b> |

**Policies**

In accordance with the discussion-centered nature of this class, each of us must agree to treat everyone else’s opinions and comments with courtesy and defend our positions intellectually to create a safe and constructive learning environment. Assignments are due at the beginning of class any late work will lose 1/3 credit (A to A-).

Academic dishonesty such as cheating and/or plagiarism will be reported to the Dean of Students office. Please familiarize yourself with UCLA's policies at the following link: [www.deanofstudents.ucla.edu/studentconduct.htm](http://www.deanofstudents.ucla.edu/studentconduct.htm). To correctly distinguish plagiarism from citation please visit: [www.library.ucla.edu/bruinsuccess](http://www.library.ucla.edu/bruinsuccess).

Please contact the Office for Students with Disabilities (OSD) to make any class-related arrangements at: [www.osd.ucla.edu](http://www.osd.ucla.edu).



## Course Revision Proposal

| Ecology and Evolutionary Biology 25<br>Living Ocean |   |
|---|---|
| <b>Requested revisions that apply:</b>              |   |
|   | Renumbering    Title    Format    Requisites    Units    Grading    Description   |
| Multiple Listing:                                   | Add New    Change Number    Delete  |
| Concurrent Listing:                                 | Add New    Change Number    Delete  |
| CURRENT   | PROPOSED  |
| <u>Course Number</u>                                | Ecology and Evolutionary Biology 25   |
| <u>Title</u>  | Ecology and Evolutionary Biology 25   |
| <u>Short Title</u>                                  | Living Ocean  |
| <u>Units</u>  | LIVING OCEAN  |
| <u>Grading Basis</u>                                | Fixed: 5  |
| <u>Instructional Format</u>                         | Letter grade or Passed/Not Passed   |
|   | Primary Format<br><b>Lecture</b>  |
|   | Secondary Format<br><b>Discussion</b>   |
| <u>TIE Code</u>                                     | Primary Format<br><b>Lecture - 3 hours per week</b>   |
| <u>GE</u>   | Secondary Format<br><b>Laboratory - 2 hours per week</b>  |
| <u>Requisites</u>                                   | <b>LECS - Lecture (Plus Supplementary Activity) [T]</b>   |
| <u>Description</u>                                  | <b>FWS - Fieldwork (Skills/Techniques) [T]</b>  |
| <u>Justification</u>                                | <b>No</b>   |
|   | <b>Yes</b>  |
|   | <b>None</b>   |
|   | Lecture, three hours; discussion, two hours; field trips, two hours. Not open for credit to students with credit for Earth and Space Sciences 15. Physical and chemical processes that take place in oceans, with emphasis on their effects on organisms. P/NP or letter grading.   |
|   | <b>Lecture, three hours; discussion, one hour; field trips, three hours. Not open for credit to students with credit for Earth and Space Sciences 15. Physical and chemical processes that take place in oceans, with emphasis on their effects on organisms. P/NP or letter grading.</b>   |
|   | The Department reviewed the course syllabi for other courses included under the Life Sciences Laboratory/Demonstration category. We found that the activities and projects that are part of EE BIOL 25 are similar to these other courses. For example, in Molecular, Cell and Developmental Biology (MCD BIO) 70 - Genetic Engineering and Society, students engage in activities similar to those in EE BIOL 25, including viewing relevant films and videos, as well as completing reports based on observational studies. Required projects in EE BIOL 25 afford students to learn how to design research protocol, formulate hypotheses, and discuss and |

|  |   |   |
|--|---|---|
|  |   | <b>present their findings.</b>  |
| <a href="#">Syllabus</a>                 |   | File <a href="#">EEB 25 Lab-Demo.doc</a> was previously uploaded. You may view the file by clicking on the file name. |
| <a href="#">Supplemental Information</a> |   |   |
| <a href="#">Effective Date</a>           | <b>Fall 2011</b>                        | <b>Fall 2014</b>  |
| <a href="#">Department</a>               | <b>Ecology and Evolutionary Biology</b> | <b>Ecology and Evolutionary Biology</b>   |
| <a href="#">Contact</a>                  |   | Name<br><b>JESSICA ANGUS</b>  |
| <a href="#">Routing Help</a>             |   | E-mail<br><b>jangus@lifesci.ucla.edu</b>  |

## ROUTING STATUS

|                  |   |
|------------------|---|
| <b>Role:</b>     | L&S FEC Coordinator - Castillo, Myrna Dee Figuracion (MCASTILLO@COLLEGE.UCLA.EDU) - 45040   |
| <b>Status:</b>   | Pending Action  |
| <b>Role:</b>     | Department/School Coordinator - Angus, Jessica Abijay (JANGUS@LIFESCI.UCLA.EDU) - 51680   |
| <b>Status:</b>   | Approved on 1/17/2014 9:07:51 AM  |
| <b>Changes:</b>  | Instructional Format, TIE Code  |
| <b>Comments:</b> | Revised secondary format to laboratory. Submitted by Jessica Angus on behalf of: Daniel T. Blumstein, Department Chair Peggy Fong, Vice Chair Undergraduate Studies   |
| <b>Role:</b>     | L&S FEC Coordinator - Castillo, Myrna Dee Figurac (MCASTILLO@COLLEGE.UCLA.EDU) - 45040  |
| <b>Status:</b>   | Returned for Additional Info on 1/16/2014 4:06:43 PM  |
| <b>Changes:</b>  | TIE Code  |
| <b>Comments:</b> | Routing to Jessica. Please see and address FEC comment below.   |
| <b>Role:</b>     | FEC Chair or Designee - Palmer, Christina (CPALMER@MEDNET.UCLA.EDU) - 44796   |
| <b>Status:</b>   | Returned for Additional Info on 1/12/2014 4:29:37 PM  |
| <b>Changes:</b>  | TIE Code  |
| <b>Comments:</b> | Please clarify if the course is meant to count as lab/demo or not. The justification for the change and the syllabus suggests that it is, but 'activity' was checked as the secondary format above instead of lab. Please check 'laboratory' as the secondary format if that is the true intention. |
| <b>Role:</b>     | L&S FEC Coordinator - Castillo, Myrna Dee Figurac (MCASTILLO@COLLEGE.UCLA.EDU) - 45040  |
| <b>Status:</b>   | Returned for Additional Info on 1/8/2014 3:32:19 PM   |
| <b>Changes:</b>  | TIE Code  |
| <b>Comments:</b> | Routing to Christina Palmer for FEC approval.   |
| <b>Role:</b>     | Department/School Coordinator - Angus, Jessica Abijay (JANGUS@LIFESCI.UCLA.EDU) - 51680   |
| <b>Status:</b>   | Approved on 1/8/2014 1:37:50 PM   |
| <b>Changes:</b>  | TIE Code  |
| <b>Comments:</b> | Submitted by Jessica Angus on behalf of: Daniel T. Blumstein, Department Chair Peggy Fong, Vice Chair, Undergraduate Studies  |
| <b>Role:</b>     | L&S FEC Coordinator - Castillo, Myrna Dee Figurac (MCASTILLO@COLLEGE.UCLA.EDU) - 45040  |
| <b>Status:</b>   | Returned for Additional Info on 1/8/2014 11:43:47 AM  |
| <b>Changes:</b>  | TIE Code  |
| <b>Comments:</b> | Routing to Jessica for chair approval.  |

|                  |   |
|------------------|---|
| <b>Role:</b>     | Initiator/Submitter - Angus, Jessica Abijay (JANGUS@LIFESCI.UCLA.EDU) - 51680 |
| <b>Status:</b>   | Submitted on 1/7/2014 10:49:09 AM   |
| <b>Comments:</b> | Initiated a Course Revision Proposal  |

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