General Course Information ES/EEMB 119:

INSTRUCTOR: Carla D’Antonio
Professor, ES & EEMB
Office: 4003L Bren
Office hours: Thurs. 2-3:30
(or can be arranged by email)
dantonio@es.ucsb.edu

TEACHING ASSISTANT: Danielle Black
Graduate Student, EEMB
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Office hours: Wednesday 4-5pm
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Course objectives: This course exposes students to range of California ecosystems and how they differ as a result of their climate, landscape position, geology& soils, history and management. Students will evaluate the importance of science in management decision-making regarding species and habitat management across California ecosystems. In each habitat, we will focus on some of the most important management challenges and evaluate the conflicts between human uses and biodiversity and ecosystem service protection. Students will also learn a few of the dominant plant species in each habitat and evaluate adaptations required to live in these habitats.

Readings: Required readings will be posted on the course web site. No text book is required. For species IDs, there will be on-line postings each week that YOU must print, and for some habitats the small book Native plants and habitats of the UCSB campus (available at bookstore or at CCBER) is very helpful.

Course meeting times:
Lectures: Wed. 2-4. These are mandatory and will be given by C. D’Antonio. They will introduce some ecological processes and features of the particular ecosystems we will look at that week and then introduce controversies where the use of science might resolve management problems.

Discussion Sections: one hour each week. These are also mandatory. Purpose will be to discuss the readings and associated controversies posted on the web for that week.. Some are full of data and will require interpretation, others just describe controversies. These complement lecture material and field trips.

Friday lab/field trips. Attendance is mandatory and is the most important part of the class! If you already know that you are going to have to miss more than one field trip, you should drop the class and let someone take it who can be there each week. We will try to visit a range of nearby habitats within reason. The 5 hr time slot is designed to give us enough time to travel to sites roughly 1 hr (max) from town, do something fun and hopefully quantitative, and then drive back to campus. There will be one weekend field trip to get to farther away ecosystems (desert and Sierra Nevada). It too is mandatory. it will leave on Nov. 10th which is a holiday so you will not miss classes. We will leave
early Friday and return late on Sunday. This will be a GREAT trip… better than a weekend partying with friends! Check your schedule and make sure you can make it. There are no make-up field trips. If you miss the weekend field trip for anything other than an emergency, your course grade will go down a full letter grade. The TA and the professor will be on each field trip and on many trips, managers/resource specialists will meet us in the field. A final in lab plant ID quiz will be given.

Grading breakdown

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Discussion section (participation, leading discussion, quizzes)</td>
<td>15%</td>
</tr>
<tr>
<td>Lecture attendance, participation, Lessons learned presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Field trips: Attendance &amp; Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Notebooks incl. beach grooming analysis, comparative synthesis at end, Species ID + plant quiz including ID and adaptations= 10%</td>
<td>30%</td>
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<tr>
<td>Term paper (15% ppt, 20% written paper)</td>
<td>35%</td>
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ES/EEMB 119. Fall 2017. Lecture and Field trip schedule:


Oct. 4: Lecture (in regular meeting space): California habitat diversity. Coastal Dune systems—organismal adaptations and human management.

6: Field trip, Coal Oil Point Reserve. (meet at COPR—picnic tables next to Cliff House, bike parking available). Dress for getting wet up to knees.

Oct. 11: Lecture: Estuaries and coastal salt marshes.

13: Field Trip, Carpinteria salt marsh & beach. (meet in Bren parking lot, Lot 1— for all trips hereafter. In space between Bren and Marine Sci. Building)

Oct. 18: Lecture: Chaparral and the management of fire (and more).

20: Field trip, Camino Cielo & Los Padres National Forest. Guests, Nicole Molinari USFS—will meet us up on Camino Cielo.


27: Field trip, Arroyo Hondo Preserve (Land Trust for SB County). PRIVATE LAND MANAGEMENT

Nov. 1: Lecture. Grassland and oak savanna continued. Term paper outline due.

3: Field trip, Sedgwick Reserve.
Nov.  8: Deserts low and high. Intro to conifer forest

10: WEEKEND FIELD TRIP. REQUIRED. To Eastern Sierra Nevada. habitats include Mojave and Great Basin Deserts, montane forest, and pinyon/juniper woodland. Vans will leave Bren lot at 8 a.m. Friday and return by Sunday at 8 p.m.

Nov.  15: Watersheds, dams and riparian corridors
17: field trip. Matilja Dam. Ventura River.

Nov.  22: Lecture cancelled.


Dec.  1st: Field trip: TBA (marine management, ocean farming)

Dec.  6: Final Lecture.
8: ROOM 4016L. Plant ID/adaptation quiz. Discussion of final presentations.

Dec.  11: Project presentations. Monday 4-8 pm, with snacks.
Dec.  13: FINAL PAPERS DUE by 5:00 pm.

Field Trip Schedule:

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>Friday Oct. 6th</td>
<td>Coal Oil Point Reserve (COPR)</td>
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<tr>
<td>Friday Oct. 13th</td>
<td>Carpinteria Salt Marsh</td>
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<tr>
<td>Friday Oct. 20th</td>
<td>Camino Cielo</td>
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<tr>
<td>Friday Oct. 27th</td>
<td>Arroyo Hondo Preserve</td>
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<tr>
<td>Friday Nov. 3rd</td>
<td>Sedgwick Reserve</td>
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<tr>
<td>Friday-Sunday Nov. 10th-12th</td>
<td>Sierra Nevada Aquatic Research Lab (SNARL)</td>
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<tr>
<td>Friday Nov. 17th</td>
<td>Matilja Dam</td>
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<tr>
<td>Friday Nov. 24th</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>Friday Dec. 1st</td>
<td>TBD</td>
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<tr>
<td>Friday Dec. 13th</td>
<td>NO FIELD TRIP- FINAL PAPERS DUE</td>
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