# LD ARCH 12 Fall 2019: Environmental Science for Sustainable Development General Course Information

**Instructor**: Matt Kondolf *kondolf@berkeley.edu* Office Hrs: TBA

Lectures: Tu-Th 1230-2p Wurster 112 Lab Sections:

Sec 101 (20640)Tue 2-4p Rm 315A Wurster Sec 102 (20641) Wed 12-2p Rm 315A Wurster Sec 103 (20642) Thu 10a-12p Rm 315C Wurster Sec 106 (34108) Thu 2-4p Rm 315C Wurster Sec 104 (20643) Fri 10a-12p Rm 315C Wurster Sec 105 (33817) Fri 12-2p Rm 315C Wurster **GSI**: Sooyeon Yi sooyeon@berkeley.edu Office Hours: TBA

**GSI**: Tyler Nodine *tnodine@berkeley.edu* Office hours: TBA

**GSI**: Vicente Tinoco vicente.tinoco@berkeley.edu Office hours: Tu-Wed 11a-12p

# **Course Description**

Landscape Architecture 12 (CCN-20654) is designed to introduce students to the interdisciplinary field of environmental science as a basis for sustainable development, planning, and design. The course combines lectures that provide a broad overview of the discipline with lab/discussion sections to give students hands-on field experience with local environmental issues such as stream ecology, air pollution, energy use, biogeochemical cycling, and introduces general concepts and specific strategies for sustainable design. The course is designed to maximize interactive, hands-on learning, by taking advantage of the Berkeley campus and region as an outdoor laboratory. Thus, the lab/discussion sections are primarily field-based to get you into the real world, experiencing your local environment and to enhance your understanding of the topics studied. Lectures are by the instructor and guest lecturers with specific expertise in the topics covered. Some lectures cover material related to section work, while other lectures are intended to introduce students to a wider range of environmental issues and scientific problems.

#### Attendance

You must attend the lab sessions each week, and complete readings and assignments (as posted on *bcourses*). Attendance is taken in lab sections. Attendance in lecture is also required, and is recorded frequently via in-class exercises and quizzes using *iClickers*. Bring your clicker to all lectures; we anticipate using them in most lectures (after the second week). If you don't have a clicker already, you can get one for about \$45 from the bookstore (or cheaper online). Students are welcome to try the app *iClicker REEF Polling*, available on the Google or IOS app stores. We cannot guarantee that it will work for you, so please use the free 14-day trial to test if it works.

#### Exams

There is one midterm exam and a final. The midterm will be 1.5 hours, in class in early October. The final will be on Friday 20 December from 8-11am. Note that the final exam falls on the last day of finals week. Unfortunately, we have no control over the exam date, which is set by central campus – so please plan your winter break accordingly. (It is *not* possible to arrange to take the exam early.) Both exams will be a combination of short answer and multiple-choice questions. The final is cumulative, with an emphasis on the material covered post-midterm. It is intended to provide you with the opportunity to demonstrate your mastery of course material and synthesize concepts studied. We will hold review sessions for both the midterm and final, and provide exam study guides.

#### **B-Courses, Readings, Films**

Important course information is posted on *bcourses*. We regularly post announcements, updates to the syllabus, lecture notes, readings and other reminders on *bcourses*. You are responsible for staying up-to-date with course developments as announced or posted on *bcourses*. Contact your section instructor if you have any questions or problems accessing the site. For some topics, you are assigned specific readings (posted on *bcourses*). In addition, three films are required, one shown in section, the others you can watch on your own online or in the Media Resources Center (Moffitt Library). There

is no textbook for the class.

# **Office Hours**

You are encouraged to come to office hours with the instructor and GSIs during the course.

# Lab/Discussion Sections

The laboratory section meetings are essential to the course. (You cannot take only the lecture.) Always check *bcourses* to confirm what is required for each week. Most labs are outside and may involve walking off paved areas, so please dress accordingly.

# Assignments

There are three categories of major assignments in this class.

- 1. <u>Lab reports</u>, due 1 hour before the following week's section meeting, unless otherwise indicated.
- 2. <u>Reading Responses.</u> Three times during the semester you submit a *reading response* on one of the readings posted on *bcourses*. These responses are opportunities to engage more deeply with the reading material and its connections to the course themes. (due on the dates indicated by 5pm)
- 3. <u>Final project:</u> Towards the end of the course, you will form groups and conduct a final research project that investigates a sustainability issue, preferably close to campus and using techniques learned in lab (or other environmental sciences techniques approved by the instructor). The course ends with final project oral presentations and paper.

In addition, there is your own *environmental science autobiography*, due 4 hours before your first section meeting (see guidelines on class website or bcourses), and occasional in-class assignments, usually done in pairs or groups of three, turned in at the end of class.

#### **Academic Integrity**

UC Berkeley's honor code states "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." While we encourage studying with peers and learning from each other, and the course includes projects that are done collaboratively in groups, when you turn in your own individual work, it is critically important that the work be yours alone, not copied from another student or another source. It's fine to use material from another source if you properly cite it. Otherwise it's considered plagiarism, and if detected, will result in a failing grade for the assignment, possibly the class, and usually further disciplinary action. Likewise any cheating on exams will result in a failing grade and further disciplinary action.

# Grading

Grading is based on multiple elements in the course, as follows. So long as you attend all your lab sections, work hard on the exercises, attend the lectures and take notes, complete the readings, you should have no problem doing well in the course. The course is not designed to 'weed out' students, but to provide multiple avenues for you to understand the concepts, learn, and do well. We draw on learning theory that suggests people learn better when engaged in activities such as measurement or active observation, rather than simply being lectured to or looking at a computer screen. Approximate weighting for different course components is listed below:

Lab Assignments	35%
Final Project	15%
Mid-term Exam	15%
Final Exam	25%
Reading Responses	5%
Participation	5%

#### Late policy

All work marked "late" in bCourses will be counted late. Points will be taken off all late assignments as follows:

- For late work submitted by midnight on the day it is due, 20% will be deducted.
- For late work submitted after midnight on the due day but within a week, 50% will be deducted.
- Work will not be accepted 1-week after the original due date.