Climate Change and the Seasonal Cycles of Nature

A professional development workshop for formal and informal science educators at the high school and adult education levels

UCSB (UC Santa Barbara) Extension Course ED X300.37

See ED X300.36 for the middle school level course

Have you been wondering about ways to integrate climate change education into your classroom?
Would you like your students to contribute important data to a national scientific effort?
Are you interested in developing a citizen scientist program for your outdoor education activities?

Join us for this fun and informative 2-unit course offered through UCSB Extension. This course will introduce you to the science of phenology – the study of the seasonal cycles in plants and animals – and how it's used to track the effects of climate change on wild plants and animals (among many other uses such as tracking allergens and predicting wildfires). You'll learn ways to convey to high school students the basics of climate change, plant growth and reproduction, plant-animal interactions, and the responses of plants to climate change. You'll also:

- ✓ Review and test phenology-themed lesson plans and outdoor activities (for high school and adult levels) and have the opportunity to customize them for your own classroom or outdoor use.
- ✓ Learn several case studies that demonstrate how plants and animals are responding to climate change.
- ✓ Practice the verbal and hands-on skills necessary to teach these concepts to your students.
- ✓ Become familiar with two statewide and national education and research organizations: the *California Phenology Project*, and the *USA National Phenology Network.*
- ✓ Learn how to contribute data collected by you and your students to the only nationwide database that's detecting the effects of climate change on the seasonal rhythms of plants and animals.

This 3-day workshop (**Thursday-Friday, June 28-29, 2012, at UCSB (4307 Life Sciences Bldg) + Saturday, October 20, 2012, at Santa Monica Mountains National Recreation Area Hqtrs**) will include hands-on activities, discussion, and testing of classroom & outdoor activities customized for your students. Meet new friends and colleagues, and initiate this novel science education effort in your school, park, club, or neighborhood.

This workshop will be tailored to serve formal and informal environmental educators at the high school and adult levels, but (depending on availability) educators at the middle school level will also be accommodated if you cannot attend the middle school level workshop (UCSB Ext. Course ED X300.36 on June 22-23 and October 13).

To enroll: Go to the UCSB Extension website: https://extension.ucsb.edu/
Please Enroll Soon! (space is limited to 20 participants!): Enrollment fee is $70 but participants will be reimbursed $150 (following completion of the course) to subsidize travel expenses.

For additional information, please contact the course instructors:

Dr. Susan Mazer (Professor of Ecology and Evolution, UCSB): mazer@lifesci.ucsb.edu or (805)-893-8011
Brian Haggerty (Graduate Student Researcher, UCSB): haggerty@lifesci.ucsb.edu or (805)-893-8066
Barbara Applebaum (Supervisory Park Ranger, Santa Monica Mtns NRA): Barbara_Applebaum@nps.gov or (805)-370-2304

UC SANTA BARBARA EXTENSION

Enrollment Instructions

Thank you for your interest in this UCSB Extension course.

You will need to enroll online if you wish to receive credit or to attend the course; space is limited to the first 20 students who enroll.

In order to enroll online, go to: extension.ucsb.edu, click on 'Courses' on the left-hand side of the homepage, and search for the following course:

ED X300.37 Section: 001

Fee for this course is: $70 Number of units: 2

Click on your course then scroll down and click 'Add to Cart' in the blue banner.

If you already have a username and password, enter them in the current users section. If not, click on new user and enter your email address and continue checkout. You will be asked to create a student profile. When finished continue checkout.

In order to be officially enrolled in this UCSB Extension course, please enroll by **May 15, 2012**.

If you need an official transcript of your grade/participation at the end of the course, log onto the student profile and click on "Special Requests" on the left side of the screen. Choose whether you want a standard or priority request and fill out the form.

If you have any problems please call Student Services at 805.893.4200.

Thank you, and please do not hesitate to contact us if you have any questions:

Professor Susan Mazer: mazer@lifesci.ucsb.edu

Co-Instructor Brian Haggerty: haggerty@lifesci.ucsb.edu

Parking at UCSB:

Before 5pm you must park in parking lots labeled with a "C"; only these are open to the public). I've circled two available lots on the map in red. There is an electronic kiosk in each lot that will instruct you how to obtain a parking pass to display on your car's dashboard. The fee is usually $7 (for all-day parking), payable with cash or credit card (Visa, Mastercard).