

Synthesizing Nature, Santa Barbara CA
Instructor: Ira Greenberg

Dec 14 – 22, 2012

Thanks for your interest in the Nature and Code class, in beautiful Santa Barbara California, December 14-December 22, 2012. Please note this course follows an earlier schedule than the other J-Term courses taught on the SMU Plano, campus.

The following document should be read thoroughly, as it contains important information about the program, including flight/ground transportation information and the daily class schedule.

Group Lodging:

We'll all be staying at the el Capitan Canyon Resort (<http://www.elcapitancanyon.com/>). el Capitan is a 300+ acre resort on the pacific coast, including beach access, a few miles north of Goleta, CA (a suburb of Santa Barbara.) We'll be staying in well appointed Cedar Cabins.

From the el Capitan literature:

"All cabins comfortably sleep 4 and have front porches, peak ceilings, are fully equipped with standard bathroom facilities, king, queen or double beds, individual heating controls, fine linens and towels, kitchenettes with microwave, mini-fridge, sink, coffeemaker, wireless access, outdoor picnic table, benches, grill and firepit."

- If students prefer to stay in semi-private cabins, (2 to a cabin) this may be arranged but will include additional costs. Please let Professor Ira Greenberg know as early as possible if you prefer this option.

Food:

Meals will include cook-outs, group meals at restaurants and El Capitan's own on-site market and deli facility, which prepares a wide array of food choices throughout the day. Their menu can be viewed at:

(<http://www.menuclub.com/californiarestaurantguide/santabarbararestaurants/elcapitancanyon-21880.php>). We will also take trips to local grocery stores, allowing students to prepare their own meals.

Classroom Space:

We'll be utilizing classroom/research space at el Capitan and also at the nearby University of California Santa Barbara (<http://www.ucsb.edu/>), a top research university built on the cliffs overlooking the Pacific Ocean.

Laptops:

Students are required to bring a laptop. (Wireless access will be provided.)

Additional Materials:

Students need to bring a portable sketchbook/journal, for collecting data, in the field. In addition, if students want to record any additional data (photographic, aural, etc.) they'll need to bring their own recording equipment.

Class Overview:

The class will combine lectures, field trips, critiques, hands-on development, study in nature and data collection. Students will work on a series of projects, inspired by natural data collected in the field. Utilizing an algorithmic approach, students will explore simulation, computer art and complexity, as they learn how to synthesize natural forms, patterns and processes using computer code and simple math.

Daily Schedule:

Thursday, Dec 13.

- Early Evening Arrival:
 - Students should arrive in Santa Barbara late afternoon/early evening on December 13. We will provide van pick-up from the Santa Barbara Municipal Airport as well as the Santa Barbara Airbus terminal, both located in nearby in Goleta.
 - Pick-up Locations:
 - Santa Barbara Airport, Goleta
 - Santa Barbara Airbus Office, 750 Technology Dr., Goleta
- For those students that need to arrive on the morning of Dec. 14, we will also provide van pick-up at both Goleta locations.
- **Flight Information:**
 - **It is recommended** that students fly into Santa Barbara Municipal Airport (SBA, <http://www.flysba.com>), conveniently located only 15 minutes away from El Capitan.
 - Students may also fly into Los Angeles International Airport (LAX, <http://www.lawa.org/welcomeLAX.aspx>) and take the Santa Barbara Airbus Service shuttle to Goleta. The shuttle takes 2-2.5 hrs. each way.
 - To search for flights: <http://kayak.com>

Friday, Dec 14.

- 9AM-12PM:
 - Walking tour of El Capitan Canyon, foothills and coast.
 - Tech prep- downloading software, configuring, etc.
 - Lunch in Isla vista (college town of UCSB)

- 2PM-5PM:
 - Processing programming language refresher
 - Project I specification
 - Data collection in the field
- Evening:
 - Fun collaborative Kick-Off Event

Saturday, Dec 15.

- 9AM-12PM:
 - Processing programming language topic lecture
 - Code studio: hands-on development
- 2PM-5PM:
 - Project I interim critique
 - Project I revisions
- Evening:
 - Open Studio for continued Project 1 revisions

Sunday, Dec 16.

- 10AM-1PM:
 - Project I final critique
 - Processing programming language topic lecture
- 3PM-5PM:
 - Project II introduction
 - Field collection
- Evening:
 - Group trip to downtown Santa Barbara for dinner and arts related event (museum late night, concert, film, etc.)

Monday, Dec 17.

- 9AM-12PM:
 - Code studio hands-on development
- 2PM-5PM:
 - Code studio hands-on development
 - Processing programming language topic lecture
- Evening:
 - Free night / Open Studio catch-up

Tuesday, Dec 18.

- 9AM-12PM:
 - Project II critique

- 2PM-5PM:
 - Code studio hands-on development
- Evening:
 - Collaborative hand's-on workshop with Dr. Crass

Wednesday, Dec 19.

- 9AM-12PM:
 - Introduction to Project III
 - Field collection
- 2PM-5PM:
 - Code studio hands-on development
- Evening:
 - Free night / Open studio catch-up

Thursday, Dec 20.

- 9AM-12PM:
 - Processing programming language topic lecture
 - Code studio hands-on development
- 2PM-5PM:
 - Dr. Scott Crass guest lecture on:
 - The Mathematics and art of curves in nature
- Evening:
 - Group dinner in Downtown Santa Barbara
 - "Late night "Code studio hands-on development

Friday, Dec 21.

- 9AM-12PM:
 - Code studio hands-on development
- 1PM-3PM:
 - Final critique
- Evening:
 - Group Cook-out

Saturday, Dec 22.

- 8AM-2PM:
 - Airport/Airbus terminal drop-offs.