**ENVS 101 Environmental Studies & Sciences Capstone Winter 2013**

***Putting a Price Tag on Nature: Using Valuation to Influence Public Policy***

**Office Hours:**

 Peter Kareiva (Varsi 215; pkareiva@tnc.org): Fridays 8:30 AM – 11:30 AM

 Virginia Matzek (Varsi 217; vmatzek@scu.edu): Thursdays 8:30 AM – 11:30 AM

Capstone is a class where we challenge you to use all of your skills to do original research, written work, and oral presentations befitting a professional in the environmental field. The course begins with a few lectures and readings to set the context for the project. After that you will work with a partner to collect data. You will use those data to write individual papers and give a talk.

This year we will ask:

1. Imagine Santa Clara County is considering changes to the system of funding county parks. Write a policy brief that draws on survey data from users of several parks to indicate whether public support exists for the changes, and describe the nature of that support. To what extent are park visitors willing to pay taxes to expand the park system or prevent its shrinkage? Here you will draw on the entire class’s dataset.
2. Do visitors to a single local park of your choosing value that park enough to defend against its closure as a cost-saving government decision? Argue orally for your park to survive budget cuts while others are closed.

These questions are two sides of the same issue—how much do we value our parks? In one case you are writing a policy brief regarding proposals for expansion or shrinkage of the parks, drawing on survey data collected by the entire class for over a dozen different parks. In the second, you are defending ONE park against a move to close it down in order to save money. Addressing these issues will expose you to an influential branch of environmental policy that seeks to use economic cost-benefit analysis and valuation to inform public decisions. Along the way you will learn how to conduct public opinion surveys and use the data from these surveys to estimate value. You will also learn about a specific park and use surveys to mount a compelling defense of that park against budget cuts.

##### Our learning objectives:

* You can explain key principles of “nature valuation”, the pro and cons for different approaches to valuation, and argue whether or not such valuation is a good idea.
* You can develop hypotheses and explanations for why parks may differ in terms of how their visitors value those parks.
* You can correctly identify and use the appropriate analyses to answer the research questions posed by this class.
* You can develop a survey, and anticipate how information gathered by that survey will help answer specific questions.
* You can produce compelling and informative graphs that support your arguments or conclusions.
* You can communicate effectively, both orally and in writing, to diverse audiences on environmental subjects and research.

**Grading and Assignments**

Attendance is mandatory except on Feb 7; regular class meetings are cancelled on Feb 28 and 29 due to evening presentations on Feb 27/28. Participation in discussion is critical to the success of the course, so 10% of the final grade is accorded to attendance and participation.

|  |  |  |
| --- | --- | --- |
| **Assignment** | **Points** | **Due date** |
| Attendance and participation | 30 | **--** |
| Written description of your survey protocol | 20 | January 23 |
| Upload your visitor survey data in Excel file  | 20 | February 12 |
| Present the most important graphic display of information for your end-of-class talk | 20 | February 21 |
| Give a 6-minute PowerPoint talk arguing to the local Park Commission why your park should not be closed to save money (use data from surveys) | 70 | scheduled for either February 27 or 28th |
| Upload your CV survey data in Excel template | 20 | Mar 1 @ 5 pm |
| Write an op-ed for the *Mercury News* arguing why your park should not be closed | 50 | March 6 |
| Write a policy brief arguing for public investment or disinvestment in SC County parks (using the CV survey dataset) | 70 | March 18 |

##### IMPORTANT: The public talk will be between 5 and 7:30 PM on Wednesday February 27 or Thursday February 28th. Dinner will begin at 5 and the talks will start at 5:30. Each talk is 5 minutes long. You will be scored in five categories: quality of visuals, quality of speech, quality of evidence, creativity, and overall persuasiveness. The panel will grade you and we will declare the park Most Safe From Budget Cuts at a later date.

**Academic integrity:** The penalty for cheating, plagiarism, or data fakery is a failing grade for the course, and the University may take further disciplinary action. Plagiarism occurs when you use the words or ideas of someone else without reference to the source. Your graded assignments must be written in your own words and not in the words of your classmates or copied from another written work. Students in this course will collect data according to Institutional Review Board protocols for human subjects research and are expected to behave with integrity and ethics in the conduct of their research. For the Santa Clara University Academic Integrity Policy see  <http://www.scu.edu/academics/bulletins/undergraduate/Academic-Integrity.cfm>.

**Disability accommodation policy:** To request academic accommodations for a disability, students must contact Disabilities Resources in Benson Center, (408) 554-4111.  Students must register with Disabilities Resources and provide appropriate documentation to that office to prior to receiving accommodations.

**Lecture and Reading Schedule**

|  |  |
| --- | --- |
| ~~Th Jan 10~~ | ~~Course introduction.~~ |
| ~~Fr Jan 11~~ | ~~Discussion: How do we value nature? Reading Package #1~~  |
| ~~Th Jan 17~~ | ~~Contingent valuation. Today’s reading: RP #2.~~  |
| ~~Fr Jan 18~~ | ~~Human subject research & survey design. Today’s reading: RP#3~~ |
| ~~W Jan 23~~ | **~~Survey protocol due by 6PM~~** |
| ~~Th Jan 24~~ | ~~In-class discussion of each team’s survey protocol~~ |
| ~~Fr Jan 25~~ | ~~In-class discussion of each team’s survey protocol~~ |
| ~~Th Jan 31~~ | ~~Public investment in parks as a policy question. Today’s reading: RP#4~~ |
| ~~Fr Feb 1~~ | ~~Conflicting uses of parks: How to resolve? Today’s reading: RP#5~~ |
| ~~Th Feb 7~~ | ~~Statistics review (~~*~~optional~~*~~)~~ |
| ~~Fr Feb 8~~ | ~~Tips on successful Powerpoint talks. Today’s reading: RP#6~~ |
| ~~Tu Feb 12~~ | **~~Upload survey data by 6pm~~** |
| ~~Th Feb 14~~ | ~~Tips on successful op-ed writing. Today’s reading: RP#7~~ |
| Fr Feb 15 | Work on data analysis in computer lab/Graphing help |
| Th Feb 21 | **Bring your key graph** to class to be critiqued and improved |
| Fr Feb 22 | Data analysis help/troubleshooting; bring a 2nd graph to class (mandatory) |
| W Feb 27 | **Student presentations & dinner (1/2 of each pair)**, 5 – 7:30 PM  |
| Th Feb 28\* | **Student presentations & dinner (1/2 of each pair)**, 5 – 7:30 PM |
| Fr Mar 1 | **CV dataset due** by 5 pm via Camino dropbox (use template for data entry) |
| W Mar 6 | **Op-ed due** by 6pm via Camino dropbox |
| Th Mar 7 | Work on CV data analysis in computer lab (mandatory) |
| Fr Mar 8 | Parks and policy; how to write a good policy brief. Today’s reading: RP#8 |
| Th Mar 14 | Work on data analysis or policy memo in computer lab (mandatory) |
| Fr Mar 15 | Senior assessment (mandatory) |
| M Mar 18 | **Policy memo due** by 6pm via Camino dropbox |

\*No regular class meetings on Feb 28 & 29 (replaced by evening presentations)