Environmenal Health and Justice

ES -56-61

Winter 2010

Instructor: Kristin Jensen Sullivan

Call # 2544

4.0 Units

De Anza College, Division of Biological, Health, and Environmental Sciences, Environmental Studies Department

Kirsch Center for Environmental Studies- Director Pat Cornely in KC 218, (408) 864-8628

“Be the change you want to see in the world”. Mahatma Gandhi

There is growing concern at De Anza College about critical environmental issues: 1) We are continuing our ~20 years of work in the Environmental Studies Department with critical issues and urge you to get involved by exploring our four degree/certificate areas and/or by engaging in stewardship projects/events. We hope that you will join us as we move along our sustainability path. We live in a hopeful time, but ACTION by all of us is necessary! 2) The College Environmental Advisory Group (CEAG) is continuing with the implementation of De Anza’s Sustainability Management Plan. You may help with the implementation of this important environmental plan. 3) Critical climate change events will be occurring this Winter, stay tuned.

INSTRUCTOR INFORMATION: Kristin Jensen Sullivan

Office Hours Held: MW 2:30-3:30pm; TTh 12:30-1:30pm; and many other times by arrangement in KC 214. I have office time for all of you.

Phone/Voicemail #: (408) 864-8625

Office Location: KC 214

E-mail Address: sullivankristin@fhda.edu

Personal Webpage: http://www.deanza.edu/faculty/sullivankristin/

ES Dept Website: http://EnvironmentalStudies.deanza.fhda.edu/es/

1) DESCRIPTION

Are you concerned about your health as well as the subject of environmental health and justice? This course explores biological, chemical and physical environmental hazards to human health. This course will investigate laws and regulations concerning environmental exposure and the means to reduce human health risks. Current events, citizen action and impacts on cultural, ethnic, and gender groups will be discussed in general, and as they relate to environmental health and justice

*Your ideas and/or suggested topics are appreciated and will be considered for discussion.

2) ADVISORIES

English Writing 1A or English as a Second Language 5. A good attitude and a willingness to learn by problem solving are essential to receiving desirable grades.

3) COMPETENCIES

After completing reading assignments, assessments, journals, projects, field assignments, and attending class, you should be able to:

1. Examine, assess and apply environmental health and justice (EHJ) concepts to modern life and to a technologically based society (EHJ careers, role of science in a changing society)
2. Describe specific structure and functions of the human body and discuss environmental agents that can pose a risk to humans
3. Identify the environments that can pose a risk to humans (EHJ discussions)
4. Identify the routes of chemical absorption, distribution and elimination, investigate the dose-response relation (doses of exposure), and assess the action of toxic substances on the human body
5. Investigate the effects of exposures to air, water, and food contaminants
6. Explore the target organ effects (toxicity, mutagens, carcinogens, case studies)
7. Investigate the regulations and standards that affect human health (EHJ issues)
8. Analyze and explore possible EHJ solutions and sustainable approaches occurring worldwide.
9. Be able to make informed decisions about environmental health and justice issues that affect your life.
10. Learn how to become an active and engaged citizen in your communities.
11. Understand that our survival depends upon maintaining a balance with supporting environments.

4) COURSE MATERIALS
   Required: Readings will be available on my webpage (downloaded, linked) or handed out in class.

5) SCHEDULE
   Please see the Tentative Class Schedule list. Note that the readings are to be read in advance of the corresponding class meeting date.

6) SUGGESTIONS/TEACHING METHODS
   This course will cover a large amount of material in a short amount of time. Therefore, it is imperative that you attend all lectures (you will be keeping a journal and journal entries will be a daily event), take good notes, and complete the readings prior to attending the lectures. Additionally, I would suggest that you take advantage of the effective and efficient learning strategies that I will present periodically throughout the course. My teaching style is designed to engage you in a more active fashion. In order to meet this goal, I will combine the following teaching methods: hands-on lectures which make use of videos, overhead transparencies, handouts, and slides; hands-on activities such as active group/discussion sessions (participation is crucial) and learning games; and, the use of various effective learning tools such as time management, note taking, memory techniques, concept mapping/timelines, the PQ3R method of reading, and cooperative study groups. To assure your success, please read and implement the information presented on the two study strategies handouts (available on my web page). Also, the BHES Division Student Handbook is available on line at http://bhs.deanza.edu/StudentHandbook.pdf as well as in the BHES Division Learning Resource Center (SC3101) in hard copy. The information in the Student Handbook applies in this course and students are held accountable for this information; it contains many helpful resources on success and classroom behavior.

7) REQUIREMENTS
   • Attend all lectures.
   1. Journal and Active Class Participation: Journal entries will be a daily class event and will include special assignments (be on time), concept maps, lecture notes, group work, stories, Internet searches and writings, discussions, thoughts, and video questions. Active participation is obviously crucial for completing journal entries. The journal should include all discussion topics assigned by the instructor during class time (specifically, journal entry number, date, discussion questions, summaries). Discussion sessions (from readings, etc.) are an important component of this course. Journal instructions will be provided during the first few class meetings. The journal is worth a total of 30% of your grade and are due on Week 9.
      If you are late for class, points will be taken off of your participation grade. If you miss a day, you must make up the missed lecture in the SRC (Stewardship Resource Center) for participation credit.
   2. Community-Based Project/Internship: You will be required to complete a minimum of 12 hours of community service on one of six projects. Additionally, you are required to complete a
minimum of 8 hours researching and getting ready to begin your community project/internship. The project/internship guidelines will be discussed in full; you will receive further oral and written instructions. The community-based project/internship is worth a total of 30% of your grade.

3. **Community-Based Project/Internship Reflections/Reports:** In order to measure your skill and understanding from your community-based project/internship, you will be required to complete two reflections and reports on what you learned. The project/internship reflections and report guidelines will be discussed in full; you will receive further oral and written instructions. The community-based project/internship reflections and reports are worth a total of 14% of your grade (7% each).

4. **Community-Based Project/Internship Oral Presentation:** You will work with a maximum of five fellow students on a community-based project/internship oral presentation on an air, water, food, land, or sustainability environmental health and justice issue. The community-based project/internship oral presentation guidelines will be discussed in full; you will receive further oral and written instructions. You will be required to share your group PowerPoint presentation with the class. This is worth 13% of your grade.

5. **Final Assessment:** One final assessment that will cover material presented from class (journal entries) lectures, videos, handouts, discussions, stories, group work, etc. Unless otherwise stated, assessment questions will NOT come directly from the readings. One week prior to the final assessment you will be provided with an in-depth study guide that will further assist you in preparing for the assessment. The final assessment is worth a total of 13% of your grade.

8) **GRADING CRITERIA**

- Journal, Class Participation
  (journal complete, cooperative group work)= 30% *(graded week 9)* 90-100= A
- Community-Based Project/Internship = 30% (20 hours) 80-89= B
- Two Community-Based Project/Internship
  Reflections/Reports= 14% (7% each) 60-69= D
- Community-Based Project/Internship Oral Presentation= 13% 0-59 = F
- Final Assessment= 13%

**100% TOTAL**

9) **ADDITIONAL INFORMATION/POLICIES**

1. General Information= Please be prepared to dedicate sufficient time and energy to this course (attending class and using and studying the course materials). Students are expected to check the lecture schedule daily

2. Fundamental values of academic integrity= This class is based upon honesty, trust, respect, fairness, and responsibility. I always appreciate your cooperation. As in all classes, cheating and plagiarism are **not tolerated**; there will be consequences!

3. An Honors cohort is being offered for this course. Eligibility requirements can be found at www.deanza.edu/honors or you may contact Alex Giardino at dahonors@deanza.edu. The cohort entails additional work [please see the instructor to fill out an Honors contract] in order to earn an Honors designation for this class on your transcript.

4. Safety and Evacuation Procedure= Please know the correct procedures to follow in the case of an earthquake or another emergency.

5. Final Assessment, Assignments, Add/Drop Rules, Grades=
   a. The final assessment must be taken during the scheduled time (except under extraordinary circumstances).
   b. You cannot pass the course without taking the final assessment. In the event of an illness or emergency on the day of the final assessment, you have 24 hours to notify me of your circumstances on my office phone.
c. Assignments are due on the dates listed in the lecture schedule. Late assignments will not be accepted (except under extraordinary circumstances). **Please see “flex” matrix below.**

d. Add/drop = See policies and procedures in the “Schedule of Classes.” It is your responsibility to follow add and drop rules (Please remember this: if you drop correctly=W, incorrectly=F).

e. You may access your final grades through the Star System [408-777-9394 or 650-917-0509] or the Internet [https://regserv.fhda.edu/da-grades.html].

**PLEASE NOTE:** There is a fine line between my helping you to be **successful** and my enabling you on late assignments. **I want you to be successful** and will be available to help you as needed. Remember, at work, you cannot be late with deadlines. Therefore, see my policy on your turned-in assignments below. Please keep this handy in your journal by making a copy of this section (the matrix below) of your syllabus:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Points off</th>
<th>Last accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-Based Project/Internship Reflections/Report #1</td>
<td>2/11/10</td>
<td>10% off per day</td>
<td>2/18/10</td>
</tr>
<tr>
<td>Community-Based Project/Internship Reflections/Report #2</td>
<td>2/25/10</td>
<td>10% off per day</td>
<td>3/4/10</td>
</tr>
<tr>
<td>Journal, Class Participation</td>
<td>3/4/10</td>
<td><strong>CANNOT BE LATE</strong></td>
<td>3/4/10</td>
</tr>
<tr>
<td>Community-Based Project/Internship Oral Presentation</td>
<td>3/18/10</td>
<td><strong>CANNOT BE LATE</strong></td>
<td>3/18/10</td>
</tr>
<tr>
<td>Community-Based Project/Internship (check on 2/18)</td>
<td>3/18/10</td>
<td><strong>CANNOT BE LATE</strong></td>
<td>3/18/10</td>
</tr>
</tbody>
</table>

“I don’t really know why I care so much. I just have something inside me that tells me that there is a problem and I have to do something about it. And I’m sure it’s the same voice that is speaking to everyone on this planet, at least everybody who seems to be concerned about the fate of the world, the fate of this planet”.

Wangari Maathai, Kenya’s Green Belt Movement and 2004 Nobel Peace Prize Recipient
<table>
<thead>
<tr>
<th>Week: ASSIGNMENT DUE DATES</th>
<th>This Week’s Topics</th>
<th>My Webpage (links, downloads) or Handout Reading Topics</th>
</tr>
</thead>
</table>
| **Week 1: 7 January**      | 1/7- Syllabus, calendar, questionnaire, Introduction to Environmental Health and Justice (EHJ), environmental injustice, Earth Charter, careers in EHJ | Earth Charter  
OSHA, Cal OSHA  
Lois Gibbs  
Worldwatch Institute  
NIH, CDC  
EPA  
OEHHA  
The Evidence of Environmental Injustice |
| Journal Entry (JE) #1     |                   |                                                          |
| **Week 2: 14 January**    | 1/14- Environmental Justice- History, Robert Bullard, Golden Gate University Environmental Justice (EJ) Symposium; EJ outline, Toxic Partners video | Robert Bullard  
EJ information  
Environmental Justice in the 21st Century |
| Journal Entry # 2         |                   |                                                          |
| **Week 3: 21 January**    | 1/21- Explain Community-Based Project/Internship: ICCE, readings for preparation of projects/internships. Importance of governmental agencies, non-profit organizations and your EJ: funding, Van Jones, Green For All, How PIEL came about. People and environmental stories | Van Jones  
Green For All  
Justice on Earth readings: why PIEL groups originated; Native American Rights Fund (coal, strip mines)  
Mark’s website  
ALA, NIH, EPA, OEHHA |
| Journal Entry # 3         |                   |                                                          |
| **Week 4: 28 January**    | 1/28- Air: Global Warming and California: AB 32- CARB live webcasts, Ed Wong, EJ clause, Global Climate Summit in L.A.  
Air: Dire Predictions: Solutions: Climate Conference in Copenhagen, video clips, Major’s Climate Protection Agreement, Urban Environmental Accords | Mark and my webpage readings: AB 32  
CARB  
Global Climate Summit  
Dire Predictions  
Climate Conference in Copenhagen  
Major’s Climate Protection Agreement  
Urban Environmental Accords |
| Journal Entry #4          |                   |                                                          |
| **Week 5: 4 February**    | 2/4- Air: Human Body: cells, body systems, toxicity, biological/chemical/physical agents, target organs, dose/response relation; Case Studies: “Air of injustice” (African Americans and power plant pollution), West Oakland, Lehigh Permanente Quarry and Cement Plant, toxins in building materials; video  
Water: CWA, my thesis work, Blue Planet book, CWA article (NY Times) | Handouts  
Air of Injustice  
West Oakland port  
Hanson’s cement plant  
CWA- Mark’s website  
SJSU-My Watershed thesis |
| Journal Entry #5          |                   |                                                          |
| **Week 6: 11 February**   | 2/11- Water: Africa, Belize, Nita’s thesis work, stories  
Water: Human body: cells, body systems, toxicity, biological/chemical/physical agents, target organs, dose/response relation. Aquatic toxicology, Endocrinology and fish physiology | Possible Africa and Belize websites  
Handouts  
Articles  
International Accountability Project Website  
International Rivers Network |
<p>| Journal Entry #6          |                   |                                                          |</p>
<table>
<thead>
<tr>
<th>Week: ASSIGNMENT DUE DATES</th>
<th>This Week’s Topics</th>
<th>Text Chapters and Pages to Read</th>
</tr>
</thead>
</table>
| **Week 7:  18 February**  | **2/18- Water:** Case Studies- Poisoned Water video; “Going to the Beach Shouldn’t Make you Sick” article; S.F. Baykeepers, Stevens/Permanente creeks (SPCWC, my history, etc.), Garcia river, Mark and environmental law (strawberry case)  
**Food and Soil:** Farm Bill, CWA, CAA, CERCLA, NIOSH, other laws and regulations; Earth Charter, Africa. Examine role of science in a changing society such as significance in health fields, agriculture, industry, technology. | S.F. Baykeepers  
SPCWC  
SCVWD  
Cupertino Parks and Recreation Department  
Farm Bill  
NIOSH  
Earth Charter |
| **Journal Entry # 7** | | |
| **Week 8:  25 February**  | **2/25- Food and Soil:** Industrial agriculture- Impacts of our industrial society on life-sustaining systems; CAFO’s (feedlots and toxins); Food Inc.; toxic food and low income communities, food videos, farmworkers and EJ; obesity and health, L.A. Times article on pollution and cholesterol links  
**Food and Soil:** Sustainable agriculture for all-CSA’s, Slow Food Movement, “Manifestos on the Future of Food and Seed” book | Food Inc  
CDC, CAFO’s  
CSA’s  
Slow Food Movement  
Food justice  
NIH  
AHA |
| **Journal Entry #8** | | |
| **Week 9:  4 March**  | **3/4- Food and Soil:** Human body- cells, body systems, toxicity, biological/chemical/physical agents, target organs, dose/response relation.  
**Case Studies- CSA’s:** History, Hidden Villa (and Community Services Agency); community gardens, Farmer’s Markets, food EJ issues, East Palo Alto  
**Overall Sustainability: Nature, Communities, Health:** Lifecycle, societal, future generations (all species!) costs; Investing in sustainability (Al Gore); “Sustainability: The Journal of Record”; Mineral King dissent; Nature Deficit Disorder; Non-toxic societies/cities (and your involvement/help); sustainable General Plans (San Jose) | Handouts  
Articles  
CSA’s  
Farmer’s Markets  
Food EJ issues  
Collective Roots  
Sustainability: The Journal of Record  
Mineral King  
Richard Louv: Nature Deficit Disorder  
General Plans- sustainability |
| **Journal Entry #9** | | |
| **Week 10:  11 March**  | **3/11- Overall Sustainability: Nature, Communities, Health:**  
**Case Studies: CEAG and SMP:** Coyote Valley and S.J.; S.J. Green Vision; Ciclovia, Critibá; The Power of Zero: The Mayan Key to Vibrant Communities (Luis Valdez); backpacking.  
**Careers in EHJ:** nature, food, transportation, goods and services, shelter. Erin Cook- Cupertino Sustainability. Green buildings and health/productivity (KCES, our home), Chris Lepe’s and Leila Forouhi’s theses on urban planning. | CEAG and SMP  
Coyote Valley  
S.J. Green Vision, General Plan update  
Critibá  
Ciclovia (Columbia)  
Careers in EHJ |
| **Journal Entry # 10** | | |
| **Week 11:  18 March**  | **3/18- Community-Based Project/Internship Oral Presentations** | |
| **Journal Entry #11** | | |
| **Week 12:  25 March**  | **3/25- Final Assessment**- Includes class information and readings from week one through week eleven. | |