

Last updated on June 30th, 2005

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The 2005 ES Alumni Survey Report was prepared by Eric Zimmerman.

The project was sponsored by the UCSB Environmental Studies Associates and the Environmental Studies Program.

Environmental Studies Program UC Santa Barbara

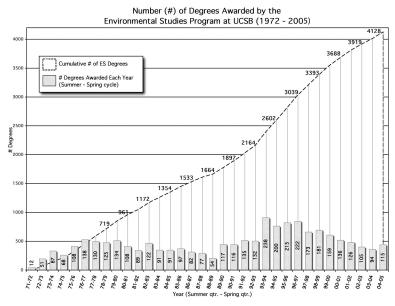
2005 Alumni Survey Final Report

It was over 35 years ago when Santa Barbara experienced the worst oil spill in U.S. history up to that time. Just a few weeks after the spill, on February 18th, 1969 a group of twenty-one faculty, calling themselves The Friends of the Human Habitat, met to discuss the possibility of promoting some form of environmental education at UCSB. By the fall of 1970 the Environmental Studies Program at UCSB was established! Today, with over 4,100 graduates, the ES Program at UC Santa Barbara is one of the oldest and most successful such programs in the world!

To mark this milestone the Environmental Studies (ES) Program and the UCSB Environmental Studies Associates, a UCSB community support group, hosted the ES Program's 35th Anniversary Celebration and Alumni Reunion in May, 2005. As part

of this event an online ES alumni survey was conducted between the months of March and June of that year in an effort to obtain critical feedback from former students regarding their undergraduate education at UCSB as well as life after graduation.

The ES alumni survey contained three sections. Section 1 asked alumni for their current contact information, work title,



and place of employment. This information was used to establish a ES Program Alumni Directory. Section 2 gathered information about a graduate's current employment status, employer information, and annual salary, creating a snapshot of the diversity of careers alumni have pursued. This data was organized into an online environmental career resource and is available to current and future undergraduates to use to better understand the variety of jobs they may obtain with a degree in environmental studies. Section 3 requested a detailed history of each alumni's education, both during and after UCSB, as well as specific comments regarding areas where they felt the ES Program excelled as well those in need of improvement. This information was used by the ES faculty in their ongoing effort to evaluate and enhance the ES Program's curriculum.

As of June 30th, 2005, $\underline{504}$ (12.3%) of the approximately 4,100 ES alumni completed the survey. This report contains the final results.

Note: The statistics included in this report are compiled from the 504 total Environmental Studies alumni who submitted a survey. However, as not all alumni answered every question, some sections have a smaller number of respondents than 504.

1.0 Location/Residence of ES Alumni

1.1 ES Alumni Live in 30 of the 50 United States and the District of Columbia

The following is a breakdown, by state, of the 495 respondents who included their current residence:

| <u>State</u> | <u>#</u> | % of 495 |
|--------------|----------|----------|
| California | 404 | 81.6% |
| Oregon | 12 | 2.4% |
| Washington | 8 | 1.6% |
| Maryland | 7 | 1.4% |

Other states with ES alumni included:

| Alaska | Missouri |
|----------------------|---------------|
| Colorado | Montana |
| District of Columbia | Nevada |
| Florida | New Hampshire |
| Hawaii | New Jersey |
| Georgia | New York |
| Idaho | Pennsylvania |
| Illinois | Road Island |
| Indiana | Texas |
| Louisiana | South Dakota |
| Maine | Virginia |
| Massachusetts | Wyoming |
| Minnesota | |

1.2 11 Alumni (2.0%) Reside in Ten Foreign Countries:

| Argentina | Guam |
|-----------|-------------------|
| Australia | Japan |
| Bali | New Zealand |
| Canada | Sultan of Oman |
| Finland | Benin-West Africa |

2.0 Undergraduate/ES Degree Information

2.1 Type and Number of ES Degrees Awarded:

| | <u>#</u> _ | <u>%</u> |
|--|------------|----------|
| B.A. (pre 1990) | 188 | 37.3% |
| B.A. Env. St. (1994 to present) | 169 | 33.5% |
| B.S. Env. St. (1994 to present) | 86 | 17.1% |
| B.A. Social Sci. Emphasis (1990-94) | 44 | 8.7% |
| B.S. Natural Sci. Emphasis (1990-1994) | 10 | 2.0% |
| B.S. Hydrologic Sci. (1994 to present) | 7 | 1.4% |
| | | |

Total: 504

2.2 Number of ES Alumni with Double Majors:

| | _#_ | % of Respondents |
|----------------------------|-----------|------------------|
| # B.A. with a double major | 135 | 28.9% of 467 |
| # B.S. with a double major | <u>29</u> | 6.2% of 467 |

Total: 167 or 35.8%

Largest Departments with ES Double Majors:

| Geography | 54 |
|--------------------------------|----|
| Economics: B.A. Economics | 18 |
| Political Science | 15 |
| Biology: Ecology and Evolution | 12 |
| Economics: Business Economics | 9 |
| Sociology | 7 |
| Anthropology | 5 |
| Biology: Aquatic Biology | 5 |
| Biology: Zoology | 4 |
| English | 4 |
| Law & Society | 4 |

2.3 Number of Alumni With an Official Minor:

| | _#_ | % of Respondents |
|---------------------|------|------------------|
| # B.A. with a minor | 22 | 5.2% of 423 |
| # B.S. with a minor | _ 7_ | 1.7% of 423 |

Total: 29 or 6.9%

Largest Depts. with ES Students Pursuing Minors:

| Geological Science | 8 |
|-----------------------------|---|
| Anthropology | 4 |
| Exercise and Health Science | 3 |
| Global Peace and Security | 3 |
| History | 3 |
| Asian American Studies | 2 |
| English | 2 |

2.4 Number of Alumni Who Studied Abroad or Participated in Experiential Education:

| <u>Programs:</u> | # of 450 |
|---|----------|
| Wildlands Studies | 43 |
| Education Abroad Program (EAP) | 38 |
| Other | 15 |
| School for Field Studies | 6 |
| UCDC | 3 |
| SEA Semester | 2 |
| Sierra Institute | 2 |
| Semester at Sea | 1 |
| Wild Rockies Field Institute | _1 |
| SEA Semester Sierra Institute Semester at Sea | 2 2 |

Total: 111* or 24.7%

2.5 # Alumni Who Completed a Senior Thesis:

As an Elective course 31 (13.7%) As a Required course 194 (86.3%)

Total: 225 (48.5%) of 464 respondents

How Alumni Ranked Their Thesis Experience (Scale: 1=lowest to 7=highest):

Overall Thesis Experience Avg: 5.99

See <u>Appendix A</u> for a summary of Environmental Studies senior thesis titles.

2.6 Number of ES Alumni Who Transferred to UCSB

Of the 468 respondents, 178 (38.7%) transferred to UCSB and ES from another institution of higher education.

ES Transfer Students and Where They Came From:

| # from CA Community Colleges | <u>118</u> |
|---------------------------------|------------|
| Santa Barbara Community College | 31 |
| Moorpark Community College | 7 |
| Santa Monica Community College | 5 |
| De Anza Community College | 4 |
| Glendale Community College | 4 |
| Golden West Community College | 4 |
| Orange Coast Community College | 4 |
| Ventura Community College | 3 |
| Others | 56 |

| # who were from UC Campuses | <u>24</u> |
|--------------------------------------|-----------|
| UC Davis | 8 |
| UC San Diego | 5 |
| UC Santa Cruz | 3 |
| UC Irvine | 3 |
| UC Los Angeles | 2 |
| UC Berkeley | 2 |
| UC Riverside | 1 |
| # who were from Cal State Colleges | <u>19</u> |
| CSU, Humboldt | 6 |
| Cal Poly San Luis Obispo | 4 |
| CSU, Long Beach | 2 |
| CSU, San Diego | 2 |
| CSU, Chico | 1 |
| Cal Poly Pomona | 1 |
| CSU, Long Beach | 1 |
| CSU, Northridge | 1 |
| CSU, Fullerton | 1 |
| CSU, San Jose | 1 |
| # from Colleges and Univ. Outside CA | <u>17</u> |
| Wesleyan University, CT | 1 |
| Willamette University | 1 |
| University of Wisconsin-Madison | 1 |
| University of Oregon | 1 |
| University of Kansas | 1 |
| Tufts University | 1 |
| University of Hawaii | 1 |
| Rollins College, WInter Park, FL | 1 |
| Roosevelt University, Chicago | 1 |
| Oberlin College | 1 |
| Ohio State University | 1 |
| Hunter College - CUNY | 1 |
| Emory University | 1 |
| Florida State University | 1 |
| Colorado State | 1 |
| Arizona State University | 1 |
| Baker University, Kansas | 1 |
| | |

2.7 Number of ES Alumni Who Completed an Academic Internship

67.1% (314 of the 468) who responded to this question completed at least one internship while at UCSB.

| # who completed two internships | 96 | 20.5% |
|-----------------------------------|----|-------|
| # who completed three internships | 35 | 7.5% |
| # who completed four internships | 10 | 2.1% |

3.

^{*}A total of 137 alumni actually answered this question, however 26 inaccurately listed experiences with their regular UCSB classes (i.e. Sage's courses on Environmental Assessment, Rod Nash's Grand Canyon Seminar, and Wilkinson's ES 176B Water Policy field trip).

| List of Larger Local Agencies Hosting ES Interns: | <u>#_</u> |
|---|-----------|
| County of Santa Barbara | 47 |
| Environmental Defense Center | 23 |
| UCSB Museum of Systematics & Ecology | 21 |
| SB Museum of Natural History/Sea Center | 12 |
| City of Santa Barbara | 12 |
| Community Environmental Council | 11 |
| Channel Islands National Park | 9 |

See <u>Appendix B</u> for a detailed list of agencies ES students have interned with.

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2.8 Areas of the ES Curriculum Alumni Found to be Most Beneficial to Their Education

Dudek/Interface Consulting

As one would expect from a multi-disciplinary and diverse faculty and curriculum, alumni provided a wide variety of courses and instructors who they found most influential during their education in ES. Here is a sample of some of the instructors and courses listed by ES Alumni as most beneficial.

See <u>Appendix C</u> for complete list of favorite courses provided by survey respondents.

Any course that included hands-on experiences and field trips.

ES 11 with Rod Nash - Inspiring, life-changing.

ES 110, Environmental Disease and the Environment, as you can see the connection between the history of the civilization and some major endemic disease/viruses.

Env. Toxicology, ES 120 - it's key to understand what/how pollutants effect people and the environment.

ES 125A, Environmental Law, and ES 131, International Environmental Law/Diplomacy, gave me a great understanding of how environmental law works.

ES 127, Environmental Education - Best taught, readily applied, and the instructor was an incredible mentor.

Susan Stonich's three class series on the Developing World and the Environment, ES 130 - provided a broader perspective on the complex and varied relationship of the environment and societies.

ES 140, Principles of Conservation Management, as we actually got to draft a conservation plan!

Paul Wack's Urban Planning, ES 135--great lecturer and very practical courses. This is where I learned how the affects that humans have on the environment are not permanent and can be changed.

The Sage's 'How to Write an Environmental Document' class, taken over 3 quarters, was particularly useful.

Environmental Impact Analysis, ES 165, was one of the few classes that gave me 'real world' experience.

American Env. History, ES 173; it gave me a historical perspective of our present condition.

Senior Thesis - provided grad-school type experience. Chance to develop own research.

2.9 Areas of the ES Curriculum Alumni Found to Need Improvement

Just as in the previous section, responses covered a diverse spectrum of topics. The more common answers are provided below.

See Appendix D for a complete list.

I'd like to see more applied politics courses that teach grass roots organizing, lobbying skills, nonprofit management and communications.

More labs and field work would have been good.

Business and economics - need to understand these elements in order to be effective in the 'real world.'

Need more on environmental policy process (local, state, federal, international) and ecological economics.

Curriculum needs to have an economic focus; it is difficult to be convincing when money is the bottom line in most of the world's view.

I feel that while the opportunities for internships are very accessible to students, not enough emphasis is placed on becoming involved with them.

More emphasis put on 'marketing' environmentalism as a way to boost company profits/national economies.

I was disappointed in the lack of motivation by the staff and professors to be involved in local env. issues.

Quantitative analytical skills because not enough courses required/developed this skill set.

There was too much 'greenwash' tolerated in classes.

Some courses had a 'doomsday' like sentiment. I think suggesting more solutions to problems instead of just dwelling on all the negative issues offers motivation.

Third World Problems class was terribly depressing. It was difficult to go to class each day with all of the gloom and doom. While it was an extremely informative class, I still remember crying in it frequently, and wish it could have had more positive emphasis on how to alleviate the problems we were studying.

3.0 ALUMNI RANK THEIR UCSB AND ES EXPERIENCE

3.1 Ranking of Their UCSB/ES Experience

Alumni were asked to use a number between 1 and 7 to rank the following topics based on their experience while an ES student at UCSB. The following were the results compiled from 449 respondents:

1 = Low (least satisfied) 7 = Highest (most satisfied)

| | Avg Score |
|--|-----------|
| Your Overall Satisfaction With Your Education Within the ES Program: | 6.14 |
| Your Overall Satisfaction With Your UCSB Education: | 5.99 |
| The Overall Quality of the ES Faculty: | 6.19 |
| The Overall Quality of the ES Staff: | 6.18 |

3.2 Alumni Were Asked to Summarize Their Overall Experience In ES at UCSB

391 Alumni responded. Below is a list of some of the more popular phrases alumni used to describe their experience in the ES Program:

| What They Said: | # of Alumni |
|---------------------------|-------------|
| Excellent!!! | 51 |
| Great! | 34 |
| I loved it | 21 |
| Very Good | 16 |
| Good | 15 |
| I enjoyed it | 9 |
| Positive | 9 |
| Wonderful | 9 |
| Fantastic!!! | 8 |
| It was great | 8 |
| Awesome | 7 |
| It was a great experience | 6 |
| It was excellent | 4 |
| Outstanding | 4 |
| Very Positive | 4 |
| Very Satisfying | 3 |
| Terrific | 2 |
| Amazing! | 1 |
| A '10'! | 1 |
| Rockin!!!!!!!! | 1 |
| | |

The list here includes some quotes provided by alumni summarizing their experience in ES at UCSB.

See <u>Appendix E</u> for a complete list of student remarks.

Wouldn't trade it for an MBA from Harvard.

I would like to do it all over again!

I could not imagine being in any other major.

Excellent, one that I would not trade in for anything.

I've never regretted a moment of the time I spent at UCSB in ES. Thanks!

Well rounded - A good starting point to explore the issues that are most important and facing our future.

Very positive - good education and good preparation for the real world.

Good program, dedicated teachers, gorgeous setting.

To this day, it's been the most important educational experience of my life.

The UCSB ES Program provided me with an invaluable foundation of the environmental field.

The most rewarding education of my life.

Led me in the direction that I am now living. Which is and was my dream.

Excellent academically, politically, socially & morally!

I couldn't imagine where I would be without it! Many seeds were planted & have fruited and I am happy to say the pollination continues......

When I left I felt well prepared to enter the workforce.

I had a very good basis for entering graduate school at UCLA and later, starting my career.

An interesting and varied undergraduate education with limited real-world professional opportunities.

Excellent. I am, however, very satisfied that I decided to double major in geography. It helped me to learn how to attack all the environmental problems that I learned about as an ES major.

I regret not having been more involved in internships.

I would recommend more studies out in the field. UCSB does not have very many classes pertaining to 'real life' projects, in my experience.

Now that I reflect, it may have been a tad preachy and less empowering than may have been necessary.

My principal complaint is it didn't provide me with enough specific skills to find a job out of college. It seems designed to groom people for graduate school.

4.0 Additional Education

4.1 Number of Alumni Who Completed Additional Education After UCSB

310 of 458 responders (67.7%) said they completed some form of advanced education after graduating from UCSB and ES.

Breakdown of Additional Education by ES Alumni

| | Total # Alumni | % of 458 Total Replies | % of 310 w/ Add. Education |
|--|-------------------|------------------------|----------------------------|
| # with a Grad Degree (M.A., Ph.D., Etc.) | 199 | 43.4% | 64.2% |
| # completed a Certificate Program | 92 | 20.0% | 29.7% |
| # completed an Assoc. or Bachelors degree | 10 | 2.2% | 3.2% |
| Other or Unknown additional education | <u>9</u> | <u>1.9%</u> | <u>2.9%</u> |
| Total: | 310 | 67.7% | 100% |

4.2 Breakdown of Post Undergraduate Education by Type:

Note: The figures below include multiple degrees acquired by individual alumni (i.e. one alumni with both M.B.A. and J.D. would have each degree listed separately).

| Ph.D. Degrees: | <u>21</u> |
|--------------------------------|-----------|
| Geography | 4 |
| Biology/Ecology | 3 |
| Economics | 2 |
| Planning | 2 |
| Chemistry/Ecotoxicology | 2 |
| Energy and Resources | 1 |
| Env. Science & Engineering | 1 |
| Environmental Studies | 1 |
| Forestry | 1 |
| History | 1 |
| Political Science | 1 |
| Rural Sociology | 1 |
| Unknown | 1 |
| Professional Graduate Degrees: | <u>94</u> |
| J.D. | 42 |
| M.B.A. | 13 |
| M.P.A. | 12 |

| M.Ed. M.E.S.M. | 9 8 |
|---|------------|
| M.P.H | 5 |
| D.V.M. | 2 |
| M.D. | 1 |
| 141.12. | • |
| Masters Degrees (M.A. or M.S.): | <u>106</u> |
| Planning | 31 |
| Environmental Studies/Science | 10 |
| Natural Resource/Wildlife Management or | |
| Conservation | 10 |
| Biology/Ecology | 9 |
| Geography | 8 |
| Environmental Management | 6 |
| Architecture/Landscape Architecture | 5 |
| International Relations/Affairs/Studies | 5 |
| Engineering/Environmental Engineering | 4 |
| Economics | 3 |
| Other | 15 |
| Certificates/Credentials: | <u>92</u> |
| Teaching Credential | 19 |
| Hazardous Waste/Materials Management | 8 |
| AICP | 7 |
| Watershed/Wetlands Management | 4 |
| Real Estate | 3 |
| Other | 51 |
| Associate and Bachelor degrees: | <u>10</u> |
| A.S. degree in Horticulture | 4 |
| A.A. degree in Nursing | 2 |
| A.A. Business Administration | 1 |
| A.S. Marine Technology | 1 |
| B.S. Landscape Architecture | 1 |
| B.S. Forest/Resource Management | 1 |
| Other/Unknown: | 9 |

See <u>Appendix F</u> for a complete list of graduate degrees and professional certificates obtained by ES alumni and from where.

5.0 Professional Skills Deemed Necessary After Graduation

375 Alumni provided comments regarding "skills" they deemed necessary for undergraduates to develop in order to enhance their marketability upon graduation from ES and UCSB.

Below is a group of professional skills recommended by ES alumni:

Experience! -- Do as many internships as possible.

Effective written and verbal communication skills, ability to work cooperatively on group projects, hands-on training and experience. One would achieve these objectives by taking classes that require analytical writing and verbal presentations, working on group projects, and participating in extra-curricular internships and field study programs.

Integrated thinking - expand those boundaries and understand how everything is connected to everything else. Good understanding of social, economic, physical and ecological factors - understand the implications of a decision.

Hands on business skills. I think the future for environmental preservation is in the hands of business people. Learning business skills puts us on an even playing field, allowing us to compete for environmentally conscious decision making.

Research Skills: All those Environmental Science papers enhanced my ability to research.

Approaching environmental issues from a broad perspective is vital.

Working with people. Do group projects.

Technical writing, articulate speaking, and public presentation skills. Take courses that will require you to prepare written projects/papers. Participate in 'Toastmasters' or another group to improve public speaking and articulate speaking. Get real world experience by having internships.

Critical thinking; writing; public speaking; negotiating and the art of compromise; the legislative and political process; listening; coalition building; and leadership. Ways to develop these skills would be through bringing in special lecturers, special seminars, internships, roleplaying real world case studies.

A good work ethic, do not expect anything to be handed to you, the way to achieve career goals is to work hard and put in your time.

Ability to organize a wide array of information, synthesize this information, and convey it to a new audience. Ability to do this in writing. Hands down, most important thing to having an impact.

Ability to work independently and well on projects. While also being able to fit into a structured work environment with varied personalities.

Any course requiring critical thinking, problem solving, or writing. I enrolled in the College Honors program which challenged me further.

How to listen before you talk. How to talk in public. How to think about the best answer to a question as the question is being asked. How to interact and get information from other people and NOT the internet; students today are too depended on the internet and have trouble networking with real people once they get out of school.

I think that the ability to think critically and creatively are what makes you successful in life. Service learning certainly helps students think outside the box and makes them connect the material they're learning to the reality outside the classroom.

Important skills needed to succeed in the E.S. field are:

- 1) Scientific methods, theory, and practical application.
- 2) Writing and speaking. 3) Business and accounting.
- 4) Environmental policy, theory, and design.

In any environmentally related field, it is crucial to be well versed in the science behind the phenomena you are interested in.

In my 'real world' writing skills are the most useful as I am generally working on multiple reports every week. Employers are generally not willing to train somebody how to write when they get hired. A student should try to get as much writing experience at UCSB as possible.

Flexibility and adaptability. Perseverance. Sense of humor. Networking.

Interpersonal relationships with co-workers, supervisors, employees. The more experience gained while an undergrad the better, so go to office hours, get an internship, write a thesis.

Develop problem-solving skills and the ability to speak effectively in public.

Most useful have been the skills I developed through extra curricular activities. Involvement in the Environmental Affairs Board, Restoration Club, environmental campaigns, political campaign are a great way to learn more and get necessary skills for how things work in the real world, as well as how to best achieve positive change.

Networking, people skills, experience as much as possible. By getting involved in extracurricular activities. By trying to be extra creative with ones school workpushing it to the limits.

Organizational skills are important as well as the ability to interact with many types of personalities.

'People skills' always come first in this world. To improve my 'people skills' I wrote for the Daily Nexus. That was the best thing I did at UCSB.

Technical Writing. Quantitative Skills (even for policy makers). Ability to analyze data using computer tools. Ability to work as part of a project team.

Writing - Economics - Statistics.

The ability to think; Employers in the real world do not place high priority on grades, but the individuals personality, communication skills and perseverance (drive to succeed).

The most useful skill is the ability to see the whole picture, make connections and communicate connections between multiple disciplines.

The skills I found to be most useful are the courses that incorporate creativity, research, and presentation into the course. This allows students to develop understanding of the 'real world' application of the ES programs.

Awareness of current events, world affairs, geography, etc. Get out and see the world!

Writing and critical thinking. A good grounding in economics is also very helpful for anyone engaged in environment management, even if you don't intend to seek a job crunching numbers. Sound policy recommendations generally require an understanding of economics.

Writing! Practice, practice, practice!

Writing, public speaking, job etiquette, social skills. I wish I would have taken more writing classes because I have forgotten most of the do's and don'ts in successful writing.

Writing, writing, writing. It doesn't matter how strong a 'scientist' you are, if you can't put coherent thoughts down on paper. It amazes me how many 'younger' people I've interviewed that can't write.

6.0 Words of Wisdom From Alumni to Current Students

Over 370 Alumni contributed thoughts as to how current Environmental Studies majors may enhance their education while at UCSB. Here are some samples:

Balance your 'book' knowledge with real-life experience through internships.

Single most important thing if you wish to go on to further education - GET TO KNOW YOUR PROFES-SORS! And in ES, this is very easy to do if a little effort and time are devoted to it. It will pay off to have those contacts.

Be a Sponge. Absorb the wealth of knowledge that the professors of UCSB have to offer.

When you are interviewing for a job, remember that not only are the companies interviewing you. YOU are interviewing them!

As with anything in life, you get out what you put into the experience.

Sleep is for the weak. - No matter what career you find as your calling, you can always bring your environmental background to it. It does not have to be nonprofit or environmental consulting, figure out what is you feel passionate about, and you will succeed.

It is often difficult to understand that those on the other side of an issue are not necessarily the bad guys, just individuals who interpret the world (and often the laws) differently from you.

Enjoy the community (UCSB, Goleta, and greater Santa Barbara). Enjoy the recreational resources (parks, trails, beaches). Balance studies and extracurricular activities. Have fun, you are only young once!!!!

Visit your student or peer advisor immediately. Map out your plan for studying at UCSB. The advisors can save you many headaches, much time, and will make your experience much more enjoyable.

Do internships rather than typical after school or summer jobs. The work experience is invaluable and you will need the edge when applying for jobs after graduation.

Be active in the community -- the UCSB community, Isla Vista community or Santa Barbara community. Get out there and get to know people. Don't just wank on the environmental problems, do something about them. And remember, your passion is not everyone else passion so just 'garden your own garden' and teach through your actions.

Be aware of the world around you. Enjoy the camaraderie of your fellow students and professors.

Be creative and willing to think outside the box when looking, finding, and defining your education and work. Don't be intimated by folks who are 'successful' or 'renowned' They started out somewhere. Find a good mentor & have fun.

Challenge your assumptions. Be aware of accepting conclusions just because they correspond to your own beliefs.

Diversify. Don't get too specialized. With the economy as tight as it is, companies need people who are willing/able to perform many different duties that might not be directly related to the job description.

Don't be afraid to disagree in class discussions. Maybe the debate will give you new ideas. The major is filled with people who actually care about what they are studying. The passion rubs off after a while.

Don't get too hung up on 'being' one thing when you 'grow up.' Life has a funny was of changing your plans.

Write a senior thesis, it's a good experience and has great post-graduation marketability.

The opportunity to access teachers during teacher office hours, and not just TA's, is great in the ES dept. Put in the effort- get to know your teachers, your fellow students, the land around the campus- all will guide you on your path.

Don't Despair!!! You will be studying and learning about things that will frustrate, anger, and perhaps depress you. But you will be with inspiring people, peers and professors, who are all interested in making this world a better place.

ES is a very real world major. Do not let anyone get away with asking 'what are you going to do with that' about an ES major. Employers want people who can think and write. They want people who can defend their ideas and ES prepares you for the real world.

Environmental Studies is a great major because environmental issues do not have boundaries. Environmental issues affect everyone!!!

Focus on real world solutions rather than problems. Protesting is pointless unless you have a better solution to the problem.

Get frequent grad checks, meet with the ES and University to make sure you are taking the right classes and that the person who is doing your paperwork knows what you're supposed to be taking!

If I could do it again I would do as many internships as possible, both for involvement in the local community, and for real world experience, because when I graduated I felt like I had no real jumping off platform.

Get involved outside of the classroom! What the professors can't or won't give you, you can learn in the real world environment. Join a group, intern with local groups, take many hikes and exploratory trips. Get yourself out there and learn by doing.

Get to know your faculty as soon as you start at UCSB. Don't wait till the last quarter of your senior year. They are an amazing resource for career advice.

Like the department motto says: 'Work hard, play harder.' You only get your undergrad once, enjoy it everyday.

Have fun! Participate in everything that strikes your fancy and don't worry about planning out the rest of your life- with an ES degree you can do anything in the world!

It's easy to get 'lost in the cracks' and do the bare minimum to graduate, but in my experience, the bare minimum doesn't help you to get a job out of school. So, take advantage of opportunities to build your resume and your skills.

Make the most of your time. Read the classics of the environmental movement, attend outside lectures, push the envelope, explore wild places, be inquisitive!

Make the time to talk to ES Alums to see what they are doing in their professional lives. And just MAYBE we will avoid some pitfalls. Don't hesitate to ask us old folks - we like helping!!!

One of the most dangerous things you can do is get caught up in the doom and gloom attitude of some people in the environmental community. Maintain a sense of empowerment and optimism in order to continue working for what you believe is right.

Spend a year or two in another country, learn another language, and put environmental issues in a global perspective through hands on experience solving real problems in a local community.

Take baby steps, realize the whole world is not necessarily on board with your ideas and beliefs about environmental change and policy, pick your battles and do your homework, the way to affect change is to have a full understanding of what it is you want to change.

There is host of life changing experiences that will tug at you during your time at UCSB. Try everything at first and learn from every experience. You will find your closest friends and create your greatest memories from your own ambition.

See <u>Appendix H</u> for a complete list of "Words of Wisdom."

7.0 ES EMPLOYMENT DATA

7.1 ES Alumni Employment Status

Of the 504 survey respondents, 455 (90.3%) were currently employed.

Of the 455 employed, 352 (77.4%) considered their job to be "environmental."

Of the 49 (9.7%) who were unemployed, the following shows their current status.

Current Status of Unemployed ES Alumni

| | # | % of 49 |
|----------------------------|----|---------|
| Current Graduate Students | 26 | 53.1% |
| Stay at Home Mom | 4 | 8.2% |
| Recent ES Graduate | 5 | 10.2% |
| Looking for Employment | 3 | 6.1% |
| In Middle of Career Change | 3 | 6.1% |
| Taking Time Off/Traveling | 3 | 6.1% |
| Unknown | 3 | 6.1% |
| Retired | 2 | 4.1% |
| | | |

49

Total Unemployed:

7.2 ES Alumni by Job Field

ES Alumni were asked to select one job field which best described their current employment or job title. 456 responses were recorded and the results are summarized in the table below.

ES Alumni Classified by Job Field:

| Estimini classifica by voo i leid | # | 0/ of 156 |
|-----------------------------------|------------|--------------|
| | <u>#</u> | % of 456 |
| <u>Planning</u> | <u>103</u> | <u>22.6%</u> |
| Architecture/Design | 2 | |
| Comprehensive | 16 | |
| Environmental | 42 | |
| Land Use/Zoning | 26 | |
| Recreation | 5 | |
| Regional | 2 | |
| Transportation | 10 | |
| Environmental Science | <u>103</u> | 22.6% |
| Air Quality | 14 | |
| Biology/Ecology | 21 | |
| Botany | 3 | |
| Energy | 1 | |
| Engineering | 2 | |
| Env. Health/Safety | 11 | |
| Fishery/Wildlife Mgt. | 4 | |
| Forestry | 2 | |
| GIS/Remote Sensing | 11 | |
| Hazardous Waste | 2 | |
| Hydrology | 3 | |
| Industrial Hygiene | 1 | |
| Mineral Resources | 1 | |
| Resource Conservation | 8 | |
| Solid Waste | 4 | |
| Water Quality | 15 | |
| Education | <u>58</u> | 12.7% |
| Administration | 7 | |
| Camps/Outdoor | 9 | |
| Current Grad Student | 6 | |
| Environmental | 6 | |
| Instructor, College/University | 11 | |
| Teacher, Primary | 10 | |
| Teacher, Secondary | 9 | |

| <u>Miscellaneous</u> | <u>56</u> | 12.3% |
|------------------------------|-----------|-------------|
| Agriculture/Horticulture | 4 | |
| Communications | 3 | |
| Computer Science | 5 | |
| Consulting | 4 | |
| Entertainment | 4 | |
| Health care | 11 | |
| Hospitality | 3 | |
| Media | 1 | |
| Public Safety | 3 | |
| <u>Business</u> | <u>43</u> | 9.4% |
| Construction | 7 | |
| Economics | 4 | |
| Finance | 7 | |
| Green Product Sales/Services | 7 | |
| Insurance | 5 | |
| Land Management | 1 | |
| Real Estate | 12 | |
| <u>Law</u> | <u>29</u> | 6.4% |
| Corporate | 7 | |
| Criminal | 2 | |
| Environmental | 16 | |
| Estate Planning | 2 | |
| Family | 1 | |
| Public Interest | 1 | |
| Policy/Politics | <u>26</u> | <u>5.7%</u> |
| Administrator | 2 | |
| Analyst | 3 | |
| Consultant | 7 | |
| Gov't Staff | 5 | |
| Lobbyist | 5 | |
| Politician | 4 | |
| <u>Other</u> | <u>20</u> | 4.4% |
| Env. Organizing/Fundraising | 9 | 2.0% |
| Land/Wildlife Conservation | <u>5</u> | 1.1% |
| Water Resource Management | 4_ | 0.9% |
| | | |

Total: 456

7.3 ES Alumni by General Employment Categories

Alumni were asked to select an employment category that best fit their current employer and job. 455 alumni responded and the results are provided in the tables below.

Employment Category of all Alumni Employed

| | _#_ | <u>% of 455</u> |
|--------------------|-----|-----------------|
| Private Sector | 164 | 36.5% |
| Local Government | 81 | 17.7% |
| Academia/Education | 59 | 13.0% |
| Non Government | 54 | 11.8% |
| Self Employed | 46 | 10.0% |
| State Government | 25 | 5.4% |
| Federal Government | 22 | 4.9% |
| <u>Other</u> | _4_ | 0.9% |
| Total Employed: | 455 | |

Employment Category of Alumni with Env. Jobs

| | #_ | % of 352 |
|-----------------------|-----|----------|
| Private Sector | 133 | 38.2% |
| Local Government | 68 | 19.5% |
| Academia/Education | 41 | 11.8% |
| Non Government | 35 | 10.1% |
| Self Employed | 30 | 8.6% |
| Federal Government | 21 | 6.0% |
| State Government | 21 | 6.0% |
| <u>Other</u> | _3_ | 0.9% |
| Total With Env. Jobs: | 352 | |

7.4 Annual Salary of ES Alumni

ES Alumni were asked to choose the annual salary range for which they qualified. 388 responses were recorded and are included below.

ES Alumni: Annual Salary

| | <u>#</u> | % of 388 |
|----------------------|----------|----------|
| \$36,000 to \$50,000 | 87 | 22.0% |
| \$51,000 to \$65,000 | 74 | 18.7% |
| More than \$96,000 | 69 | 17.5% |
| \$66,000 to \$80,000 | 55 | 13.9% |
| \$21,000 to \$35,000 | 53 | 13.4% |
| 0 to \$20,000 | 34 | 8.6% |
| \$81,000 to \$96,000 | 23 | 5.8% |

7.5 Short List of Actual Job Titles and Employers of ES Alumni:

| Job Title | Employer |
|---------------------------------|---|
| <u> </u> | Miller Hayashi Architects |
| | US Coast Guard |
| 18 | U.S. Geological Survey |
| | Oregon Dept. of |
| | Transportation |
| Senior Env. Engineer | Lowney Associate |
| President/Principal Planner | Urban Planning Concepts |
| District Superintendent | CA Dept. of Parks & Rec. |
| Associate Professor | Cal Poly San Luis Obispo |
| | Land Trust for Santa Barbara County |
| Aquatic Ecotoxicologist | Pacific Ecorisk |
| | League of Conservation Voters |
| Air Pollution Specialist | CA Air Resources Board |
| | Centers for Disease Control & Prevention |
| Director of Conservation | New England Aquarium |
| Waste Diversion Manager | EcoNomics, Inc. |
| Photo Interpreter/GIS/Ecologist | Bureau of Reclamation |
| | U.S. House of Reps. Committee on Resources |
| ž | Planning and Development, SB County |
| CEO | Big Brand Water Filter Inc |
| | Conservation Mgt. Inst. at Virginia Tech |
| ,100 1100140110 | Bonneville Environmental Foundation |
| Battalion Chief | USDA Forest Service |
| Staff Attorney | Env. Defense Center |
| ε | NASA Groundwater Cleanup |
| 1 , | Lewis and Clark National Historical Park |
| Landscape Contractor | Debbie Shaw Landscape |
| Elementary School Teacher | Goleta Union School Dist. |
| Supervising Senior Counsel | CA Dept. of Conservation |
| Asst. Secretary of Resources | CA Resources Agency |
| | Coalition for Sustainable Transportation |
| | Center on Race, Poverty & Environment |
| Underwriter, National Accounts | AIG Environmental |
| | Confluence Restoration |
| | Confidence Restoration |
| Resource Forester | Lolo National Forest |

8.0 Additional Comments About ES From ES Alumni

I am very proud to have graduated from this school and this program.

A pioneering program that was ahead of its time. My hat's off to those to conceived it and made it happen.

Congratulations on 35 years of providing educated caring stewards of our planet.

Eric Zimmerman really does an excellent job informing the ES students about internships and scholarship opportunities. The teachers within the ES program are also so amazing.

Greatest major at the best school on the planet. Maybe I'm exaggerating, but it's close.

I am extremely proud to have been in the first class of Environmental Studies graduates at UCSB. I felt that I received an excellent education from faculty who were passionate about their beliefs.

I am proud to say that I attended UCSB's environmental studies program. It was a great experience and I remember it fondly.

I can't effuse enough about my experience at UCSB. I wish the accomplishments of the Program were featured more so I felt informed about current research, etc.

I found the relationship with other departments to be one of the strengths of the program. I doubled with Geography and effectively had a minor in History. The intersection of my education within these three disciplines has served me well.

I greatly admire the ES program's continuous development and improvement over the past 30+ years.

I love the ES reunions, the newsletters and belonging to ESA. It makes me feel like I am part of a family and that there is still a group I am connected to.

I would do anything to do it all over again!

I'd love to be a guest lecturer or course instructor at UCSB ES; then my life would be complete! By the way, my future wife was also '78 ES grad and our first son is 2001 UCSB ES grad.

Marc McGinnes was extremely inspiring. The best instructor ever!

My TAs were the greatest, I think of them (especially Lisa Berry) when I teach undergrads here at SIU.

Please keep up the fantastic work! Many of my students have and are coming to UCSB to study environmental studies/science.

The E.S. Program changed my life and provided a very good foundation for an interesting and varied professional career.

Why don't we have the Arent 'Barry' Schuyler School of Environmental Studies?

Santa Barbara is a HOT SPOT when it comes to environmental issues. Because of this, it's imperative the ES Program put both students and professors in a place to be able to address some of these issues head on.

Thank you to those professors who bring their whole selves to educating young adults and remain passionate and continue to learn to be better.

The people in the ES department are the best on campus. I wish I could have dealt with only them.

Eric Zimmerman is a wonderful advisor. He is the glue of the environmental studies department. I truly cherished his advice and he has helped me get to where I am now....happy.

I wish that faculty could work together to create a curriculum that doesn't overlap. I feel that a couple of my classes were unnecessarily repetitive.

I believe a thesis should be required- it was the cornerstone of my education.

Definitely a liberal tilt to the program and the majority of the professors who teach in the program. It would be nice to have a little more balance.

I did not take the environmental law class at UCSB. This should be a required course as the law is what drives most of the activity in environmental industry.

I wish my education in the ES Program was more focused. I did not realize that it needed to be and was allowed to float by without really trying to find direction.

I know it is not the job of a university to help students find a job after college, but maybe a little more could be done to help students 'discover' what kinds of jobs are out there for ES graduates. What are the skills we should have after coming out of the ES program?

I think it is important to allow two paths, one socialscience and one hard-science. I do think that within the social-science path it is important to encourage students to focus within one area of the environment.

I think the Program should incorporate a class on Environmental Justice and a person of color should teach it.

I feel there is something fundamentally missing from the ES program that is causing it not to achieve its full potential. The program seemed too institutional and could use some more creativity and cutting edge energy. Lack of connection with the local environmental movement, more stimulating faculty who know how to teach, more creative academic setting.

We need diversity in the ES program. UCSB is one of the whitest UC campuses and ES seems to be the whitest program.

See <u>Appendix H</u> for more comments.

9.0 OTHER INTERESTING FACTS ABOUT UCSB'S ES ALUMNI

Below are some interesting statistics compiled about Environmental Studies graduates. Note: These figures include all ES Program alumni, not just those who completed the 2005 survey.

9.1 Peace Corps

105 ES alumni from UCSB have or currently serve as Peace Corps Volunteers in 45 different countries.

Here is a list of the more popular countries with ES Alumni serving as Peace Corps Volunteers:

| Country | # ES Volunteers |
|--------------------|-----------------|
| HONDURAS | 8 |
| PHILIPPINES | 7 |
| COSTA RICA | 6 |
| PARAGUAY | 6 |
| NICARAGUA | 5 |
| DOMINICAN REPUBLIC | 4 |
| EL SALVADOR | 4 |
| GUATEMALA | 4 |
| JAMAICA | 4 |
| PANAMA | 4 |
| CHILE | 3 |
| GUINEA | 3 |
| GUYANA | 3 |
| BENIN | 2 |
| EASTERN CARIBBEAN | 2 |
| GHANA | 2 |
| LIBERIA | 2 |
| MOROCCO | 2 |
| NIGER | 2 |
| SENEGAL | 2 |
| SIERRA LEONE | 2 |
| TANZANIA | 2 |
| ZAIRE | 2 |
| ZAMBIA | 2 |
| KENYA | 1 |
| THAILAND | 1 |
| ROMANIA | 1 |
| MADAGASCAR | 1 |

9.2 CA Bar Certified/ES Alumni Lawyers

There are **35** confirmed ES alumni (probably more) who are members of the California Bar, and hundreds more who have received a law degree.

9.3 UCSB's Bren School of Env. Science & Management

To date, 22 alumni were or are currently enrolled in UCSB's Donald Bren Graduate School of Environmental Science and Management. Degrees include the Masters in Environmental Science and Management and Ph.D. in Environmental Science.

9.4 UCSB's Graduate School of Education

There have been 14 **ES Alumni who** graduated with a masters degree or teaching credential from UCSB's Gevirtz Graduate School of Education.

Visit the Environmental Studies Program's website for access to the electronic version of this report, the ES Alumni Directory, and the Environmental Career Profile database.

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Appendix A: Sample List of ES Senior Theses Titles

| Thesis Title: | Student's Name Year | , • |
|--|--------------------------------|--------|
| A Bullet Train Rail Plan for California | June C. Pujo | 79 |
| A Cost Benefit Analysis of Photovoltaic Technologies | Scott Elliot Lowe | 92 |
| A Loophole in the California Environmental Quality Act | Susan M. Peters | 89 |
| Advertising by Environmental Groups During Political Campaigns | Holly A Zimmerman | 78 |
| Agrobusiness in Mexico | Lori I. Austin | 79 |
| Agricultural Irrigation Methods | Andrea M. Eaton | 93 |
| Agroforestry in Tropical Latin America: Potential for Sustainability? | Kimberly J True | 99 |
| Air Pollution Control in Santa Barbara County | John B Garnett | 83 |
| An Economic Analysis of California's Wind Energy Industry | Thomas J Starrs | 83 |
| Antibotic Resistance as a Result of Environmental Pollution with Antibiotics | Darrell T. Lind | 2000 |
| Aspects of Free Parking for Motorcycle and Scooters at UCSB | Quang N. Do | 2003 |
| Attitudes Surrounding Sport hunting | Ron Levy | 80 |
| Bad Bugs Bite Back - Antibiotics as an Environmental Issue | Steve L Heilig | 79 |
| Christianity and the Environment | Laurie A Yung | 91 |
| Creation of a Pedestrian Mall on State Street | Mary K Bean | 88 |
| Deep Sea Manganese Nodules | Michelle I Hornberger | 85 |
| Eco-labels, Do They Tell the Truth? | Tricia L Allen | 2000 |
| Electric Power Transmission | Craig H Hamilton | 85 |
| Electromagnetic Fields and the Environment | Scott Giesler | 92 |
| Energy Efficiency in Wineries | Robin E. Ijams | 85 |
| Env/Econ Impact of WECS on CA Aqueduct System | Lawrence W. Appel | 80 |
| Environmental Children's Book | Marlene Anapolsky | 77 |
| Fate of the Salton Sea | Jeffrey S Klinger | 90 |
| Feasibility of Coal Gasification Technologies for California | Michael P Gialketsis | 79 |
| Fire Ecology | Steve G. Brown | 73 |
| Feral Pigs of Santa Cruz Island | Mike Biedebach | 92 |
| Fisheries of the San Joaquin/Sacramento Delta | Scott A Schell | 82 |
| Fresno State Football Stadium EIR Review | Nancy L Minick | 76 |
| Groundwater Law in California | Alison W Jordan | 90 |
| Growth Management in SB County | Joe Coffman | 78 |
| Ocean Thermal Energy Conversion | Kenneth E. Marshall | 78 |
| Oman's Energy & Environment | Alexandros Karim Pachiyannakis | 2001 |
| Over-Population in Nepal | Kathy M Pfeifer | 87 |
| Remote Sensing of Third World Crops | Rich Walker | 81 |
| The Economic Viability of Organic Farming | Michael J Zucchet | 92 |
| Role of Psychology in Solving Environmental Problems | Mindy Norris | 90 |
| The Effect of the Environment on Obesity | Elizabeth A. Howse | 2004 |
| Transferable Permits and Greenhouse Gas Emissions | Stephen F Hamilton | 91 |
| Trace Element Nutrients and Toxicants | James A. Peterson | 80 |
| Water Quality Monitoring of UCSB Campus Lagoon | Justin P Saroyan | 2002 |
| Wildfire in Santa Barbara County: Evil Threat or Benevolent Necessity? | Christian A Childers | 83 |

Appendix B: List of Example Agencies ES Alumni Have Interned With:

Local Examples

Environmental Defense Center, Santa Barbara

US Forest Service, Los Padres

CalPIRG

City of Santa Barbara Water Resources Department

California Coastal Commission
Direct Relief International

Museum of Systematics and Ecology, UCSB

Monte Vista Elementary School

County of Santa Barbara Comprehensive Planning

Santa Barbara City Planning Channel Islands National Park Santa Barbara ChannelKeeper

Island Packers Co.

Santa Barbara Sea Center

City of Carpinteria Planning Department Community Environmental Council UCSB Housing and Residential Services

Audubon Society

Natural History Museum, Santa Barbara

Scholfield Solar Energy

Santa Barbara County Water Agency Interface Planning & Counseling State Senator Jack O'Connell Congressman Capps Office Citizens Planning Association

Isla Vista Elementary School, Garden Program

Goleta Water District

UCSB Office of Environmental Health and Safety

LivingGreen Building Materials

Garcia Architects Santa Barbara Zoo Urban Creeks Council

Raytheon Co.

Santa Barbara Association of Governments

Nature Conservancy Fairview Gardens Goleta Valley Beautiful

Lake Cachuma Operations and Maintenance Board

IV Parks and Recreation

Ocean Futures

Southcoast Watershed Resource Center

Non-Local Examples

Alameda County Environmental Health

American Lung Association

American Red Cross

CA Dept. of Water Resources

CA Office of Appropriate Technology

CA State Parks
Cearnal Architects

Center for Sustainable Development in Americas

Chevron, USA

Citizens for Conservation

City of Pismo Beach Planning Dept. City of Torrance Enviro Division Congressman Mike Thompson

County of San Diego
EPA, Washington D.C.
General Electric TEMPO

Jatun Sacha Foundation in Ecuador Lindsay Museum Wildlife Rehabilitation Los Angeles City Planning Department

NASA

National Clean Air Coalition, Washington, DC

Nature Conservancy, Hawaii NRDC, Washington D.C. Oregon State Parks

Research Assistant, Santa Catalina Island Sea Shepherd Conservation Society

Sea World San Diego, Assistant to the Env. Director

Siera Club, Washington DC

SUNRAE (solar energy non-profit)

Tetra Tech, Inc.

Univ. of Southern Alabama-Dauphine Island Lab

US BLM - Colorado

US Congress

US Mineral Management Service

US Park Service, Yosemite

US Treasury Department, Washington D.C.

Ventura County Pathways Project

<u>Appendix C</u>: List of ES Courses Alumni Found to be Their Favorite:

| Quote | Yr. Grad |
|---|----------|
| All of the courses that helped me improve my writing skills have also given me a professional boost. | 2003 |
| All of them! Every one has helped me teach my Advanced Placement Environmental Science course. | 2001 |
| American Env. History, ES 173; it gave me a historical perspective of our present condition. | 81 |
| An environmental economics class taught by a visiting professor; taught such things as how to assign value to intangible things such as the resources impaired or destroyed in an oil spill useful. | 81 |
| Animal Ethics, ES 143, because I'm still a vegetarian to this day!! | 2001 |
| Any courses that included hands-on experiences and field trips. Opportunities for independent research, internship etc. are essential for real-life experiences. | 99 |
| Anything taught by Marc McGinnes or Mark Schlenz!! Both taught me to really push myself and have respect for the environment in anything I do. By far, the most influential people in my life. | 2001 |
| Barry Schuyler's Energy Development Class - most complete and balanced ES class with overview of energy development, use, calculations and active TA sessions. | 87 |
| Being a Peer Facilitator for ES 1; highly beneficial for public speaking, team work skills, confidence amongst peers. | 2001 |
| Biology from Hardinbecause it was Hardin. | 75 |
| Channel Islands, ES 111, it led me to get my first job out of school that I absolutely fell in love with. | 2001 |
| Environmental Ecology, ES 100, it taught about systems thinking and the professor was great. | 2001 |
| Env. Education, ES 127, because it opened my eyes to the values of teaching environmental education to others. | 2002 |
| Environmental Impact Analysis, 165, was one of the few classes that gave me 'real world' experience. All of Paul Wack's planning classes-they were education and fun! | 2002 |
| Environmental Impact Assessment seriesnot my favorite courses to take, but the most practical for career purposes; Paul Wack's Urban Planninggreat lecturer and very practical courses. | 85 |
| Environmental Law courses because it exposed me to a career I would not have had much specific knowledge about otherwise and the courses were excellent and provided practical knowledge. | 95 |
| Environmental Planning courses and SimCoast; and independent study with Dr. Susan Stonich. | 95 |
| Environmental Toxicology, ES 120 (Rob Hatheril) - it's key to understand what/how pollutants effect people and the environment. An excellent professor with a lot of passion. | 2000 |
| Env. Simcoast, ES 126A - Class improved my computer skills which has given me the edge for every job I've ever applied for. Class also gives a glimpse into office politics. It was excellent experience. | 2002 |
| ES 106 - Critical Thinking and the Environment: the course has major impacts on my approach to solving environmental problems/building a sustainable society. | 2003 |
| ES 11 with Rod Nash - Inspiring, life-changing | 92 |
| ES 11 with Rod Nash. It created excitement by celebrating the importance of our natural resources. | 95 |
| ES 11, Got me interested in the major. | 91 |
| ES 110, Environmental Disease and the Environment, as you can see the connection between the history of the civilization and some major endemic disease/viruses. | 2004 |
| ES 115, 105, any that Mel teaches. I have an interest in energy and china and his curriculum is right on point with that. | 2005 |

| ES 125A, Principles of Environmental Law, and ES 131, International Environmental Law and Diplomacy, both gave me a great understanding of how environmental law works. | 97 |
|---|------|
| ES 127, Environmental Education - Best taught, readily applied, and the instructor was an incredible mentor. | 95 |
| ES 165A and 165B, Environmental Impact Analysis, gave me real world experience that helped me find an internship and prepared me for a job in the environmental consulting field. | 97 |
| ES 190. The class discusses current topics and I found it to be beneficial because it applied to everyday living, and I enjoyed learning about the issues surrounding my life. | 2003 |
| ES 21, Future Environments. I was inspired and amazed by the sense of community that grew during that class. Marc McGinnes changed my life with some of his lectures. | 2003 |
| ES11 - because it recruited me and so many others into the program Environmental Law classes-challenged me to a higher level of study and professionalism. | 90 |
| I liked all of the introduction ES classes (1, 2 and 3) because they gave a nice broad view of the material. | 2004 |
| I liked 'The Idea of Nature,' ES 187, because it catered to my philosophical interests and helped me understand the way humans are viewing their environment and nature. | 98 |
| I really enjoyed Dr. Susan Stonich's Third World Environments series, ES 130, because it was fascinating as well as very relevant to the kinds of issues I find most interesting. | 2001 |
| I really enjoyed my Environmental Geology and Environmental Chemistry courses. They helped me look at my surroundings and contemplate what was going on with the Earth physically. | 99 |
| The Sage's 'How to Write an Environmental Document' class, taken over 3 quarters, was particularly useful. | 81 |
| I thoroughly enjoyed ES 160, which I took with Schlenz, he required a book a week and so I got to read a lot of interesting books about the environment and environmentalists. | 2004 |
| Integrated Waste Management, ES 172, was helpful and directly ties into my work. | 2003 |
| Internships and Senior Thesis. Internships provided hands-on real-world application of classroom content, as well as opportunities to clarify potential career paths. Senior thesis provided opportunity to engage in large-scale research with preparation and writing of detailed, large-scale paper and oral presentation. | 84 |
| Mel Menalis' energy development class, ES 115 - we took field trips to Zond solar field and the Tehachipee wind farm. | 87 |
| ES 140, Principles of Conservation Management, as we actually got to draft a conservation plan! | 2004 |
| Oliver Chadwick's soil science courses, ES 114, have been the most useful to my present occupation. | 2004 |
| Paul Lehman's geology class - he was a great teacher - and it was a thrill to spend a few days on Santa Cruz Island studying the unique features of that land mass. | 87 |
| Senior Thesis - provided grad-school type experience. Chance to develop own research. | 97 |
| Susan Stonich's 3 class series on the Developing World and the Environment, ES 130 - provided a broader perspective on the complex and varied relationship of the environment and societies. An excellent professor with a lot of passion. | 2000 |
| The Environmental Assessment series with Orin and Cindy Sage and the hydrology courses I took by Ed Keller. | 81 |
| Urban Planning classes from Paul Wack. This is where I learned how the affects that humans have on the environment are not permanent and can be changed. | 2001 |
| Water Policy of the West, ES 176, with Bob Wilkinson, enabled me to understand about some of the agencies that affect environmental laws. | 2003 |
| 'Wilderness and Man' started my interest in the Environment; 'Canyonlands' was an awesome way to learn about the wilderness and then experience it. | 83 |

Appendix D: List of ES Courses/Curriculum Alumni Found to Need Improvement:

| <u>Quote</u> | Yr. Grad |
|---|----------|
| An important part of environmental policymaking and activism requires skills in advocacy. I'd like to see more applied politics courses that teach grassroots organizing, lobbying skills, nonprofit management and communications. | 81 |
| Business and economics - need to understand these elements in order to be effective in the 'real world' or cost/benefit. | 81 |
| Career Guidance! There was NONE. I guess I figured out that there were no jobs available for a B.A. when I was a senior, but I had no desire to get an M.A. I just hoped there would be something out there for a college grad. Whoops. | 80 |
| Economics and crossover to real-life practicality. | 81 |
| ENV S 1, I took it in Fall 1999 and the course was a joke; since students weren't responsible for lectures no one came. | 2004 |
| Environmental Ecology class, ES 100, was too general. Teacher didn't make material very capable of understanding. Needed to focus more closely on a smaller number of topics. | 2004 |
| Environmental economics - I still get a chuckle out of the visiting Econ professor that tried to convince us that from an 'economic' point of view that drip agriculture does not work. | 82 |
| ES 106, Critical Thinking & Environmental IssuesI took this course with Freudenberg and found it confusing. The concepts weren't that complicated, but still somewhat hard to grasp. It may have been the way the course was organized with the readings and lectures because I had difficulty linking the professor's perspective with the readings. The book was good and easy to read. I think the course should keep the group project portion because that was VERY useful in learning how to work in groups and gain presentation skills. May need some improvement in how lectures were organizedmore discussion and less going off on tangents. | 2003 |
| ES 11 (now ES 1) used to scare prospective students away! I think there needs to be more 'hands on learning. | 2002 |
| ES 11 was terrible and I know scared some people away from ES. ES 1, 2, and 3 will always need refinement and creativity in inspiring students. I generally liked the curriculum. | 2003 |
| From some of my courses, I received more training from the teaching assistance rather than the professors. | 2001 |
| I am personally weak in statistics and other math related forms of analysis. I didn't learn much from classes in these subjects because I was intimidated and was unable to overcome my intimidation. | 76 |
| I feel that while the opportunities for internships are very access able to students, not enough emphasis is placed on becoming involved with them. | 2002 |
| I felt it was a mistake to drop the Senior Thesis requirement for E.S. students. In my view, that weakened the overall experience and value of the E.S. Program. | 94 |
| I had a horrible experience with the senior thesis. Despite having it pre-approved and completing it, it was rejected on grounds inconsistent with what I had been advised at the onset. Little effort was made to address the faults made by the senior thesis advisors. To this day, it has left a bad taste in my mouth because of the time and energy I invested in both the thesis and attempts to wade through the unprofessional hostility I received. | 2002 |
| I hate that we had to take the general bio class, which I found to basic and irrelevant. It would be great to have an environmental bio class like the chemistry one. | 2003 |
| I think classes like ES 190, that promote internships, should be taken earlier to let the student know what's out there. | 2004 |
| More emphasis put on 'marketing' environmentalism as a way to boost company profits/national economies. | 2001 |
| I think some of the requirements were extraneous. Such as energy and the environment - though I enjoyed the class, it has not proved useful. | 2002 |
| Only thing I regret is not having participated in an internship or a senior thesis. I wish both had been required. | 2002 |
| I think the program needs more focus an preparing students for specific careers. | 97 |
| The statistics and environmental chemistry were useful, but the calculus was not necessary for me. | 98 |
| The internship program needed more work in getting info out to students. | 95 |

| I was disappointed in the lack of motivation by the staff and professors to be involved in local environmental issues. Besides Prof. McGinnes, I don't think that any other professor ever encouraged us to get involved in local environmental issues. I was also disappointed in the lack of analysis by the professors on the population 'crisis'. I don't think it's fair to blame immigrants or women in third world countries for this. | 98 |
|---|------|
| I would have liked to have found out about the Senior Thesis earlier. Have the Senior Thesis required. | 2001 |
| Would have liked to learn more about the balance between the disciplines of economics and environmentally responsible business practices. | 98 |
| I would like to see more classes offered that discuss the topics of race and gender in relation to environmental studies. | 2003 |
| Internships should be required, too many students need outside experience to bring to the discussion sections and stimulate their learning process but not many did the internships. | 99 |
| It's more helpful if there is a class emphasizing on 'environmental economics' using specific issues as case studies. | 2003 |
| Many of the environmental law courses could be strengthened. | 97 |
| More labs and field work would have been good. | 80 |
| More of the classes should involve field-trips and hands-on education, rather than relying so much on text books. | 2001 |
| Need an Environmental Politics course - I would've greatly benefited from taking a course like this. | 96 |
| Need more hands on curriculum, applicable to the real world. Focus on government/business relationship and environmental issues, especially in California. | 83 |
| Need more on environmental policy process (local, state, federal, international) and ecological economics. Also need a basic Ecology class. A seminar on problem-solving and incentive approaches to environmental policy would be helpful. | 94 |
| Needed an option to pursue a more physical science oriented program. | 80 |
| No one ever was really ever available for counseling on life after college. I never participated in an internship and I wish someone would have stressed how important and beneficial an internship would have been. I worked my way through school- so I did not think I had the time to participate in an internship. | 2000 |
| Quantitative analytical skills because not enough courses required/developed this skill set. | 98 |
| Religion and the Environment: too biased, relaxed and non-academic. ES 116, Urban Development: too many movies but awesome reader. Lets work on making lecture style more engaging. | 2005 |
| Solar, Renewable Energy, I felt the info was outdated. | 2001 |
| Some of the courses had a very 'doomsday' like sentiment. I think suggesting more solutions to each problem instead of just dwelling on all the negative issues would have left me with more motivation to stay in the field. | 99 |
| The curriculum needs to have an economic focus because as nice as being environmentally aware is, it is difficult to be convincing when money is the bottom line in most of the world's view. | 2002 |
| The Environmental Law class was more historical, which was fine, but I would have liked the class to progress to current laws, but there was only 1-2 sessions spent on current laws. | 98 |
| The thesis would have been a more valuable exercise if it was a project that was more integrated into the curriculum. | 79 |
| There is not enough opportunity for public speaking. | 2002 |
| There was a huge gap (when I was there: 1998-2001) between the B.A. and B.S. degrees, which made it difficult for either B.A students to learn about the science behind ES or the B.S. students to learn about the sociopolitical aspects of ES. | 2001 |
| There was too much 'greenwash' tolerated in classes. | 2000 |
| There were a couple of professors that focused more on their political platform than on our education. | 2003 |
| There were a lot of pre-major classes! Sometimes the classes were too based in theory, not very practical. | 2001 |
| Third World Problems class was terribly depressing. It was difficult to go to class each day with all of the gloom and doom. While it was an extremely informative class, I still remember crying in it frequently, and wish it could have had more positive emphasis on how to alleviate the problems we were studying. | 99 |

Appendix E: Complete List of Alumni Remarks Regarding Their Overall ES Experience at UCSB

I would like to do it all over again!

Excellent - I just wish I could make my living at it.

A freakin' blast! Courses made me think - and not always in a linear fashion.

Very satisfying and some of the best years of my life.

The ES program at UCSB has helped me keep an 'ES' career as well as change my lifestyle for the better.

Very beneficial in expanding my knowledge of a field I'm passionate about.

The UCSB Environmental Studies Program provided me with an invaluable foundation of the environmental field.

The faculty was cutting edge in their fields and full of contagious passion.

The Environmental Studies Program was often willing to engage me when other programs would not...

Solidified my passion for learning about, creating awareness, and finding solutions for today's environmental issues.

It was well-worth my financial aid loans.

It was the kick-off to a very rewarding career and I would never trade it for the world!

It was excellent academically, politically, socially and morally!

I thought it was great. I liked the balance of theory, hard science and real world application.

I had a very good basis for entering graduate school at UCLA and later, starting my career.

A wonderful experience I now find myself getting more nostalgic for.

I'm a second generation UCSB ES grad (both parents graduated with BA's in '78), and would encourage my kids to follow up on being the 3rd. The ES program was the best thing for me; it had enough flexibility to allow me to explore my intellectual curiosity and still graduate in 4 years with a double major, while still teaching practical and useful skills and information.

Fantastic. I learned more than I ever dreamed, made life-long friends, and still use the education that I received from program.

The program was perfect for me. It integrated my interest in science, writing, and the outdoors into a cohesive and adaptable package.

The switch from a Biological Science Major to an ES Major was one of the best choices I made. The Environmental Studies program opened up a field of real world jobs that I did not know existed while I majored in Biological Sciences.

For those who like grades I would confidently say A+. The Professors, Adjuncts, student counselors, student/faculty gatherings and core curriculum are what made the experience amazing.

The Hydrologic Sciences major was a perfect match in preparing me for my current position. Unlike most people I know, I use what I learned at UCSB daily.

The ES program was one reason why my experience at UCSB was so great. The faculty and staff were always dedicated to their class and tried to challenge students. Additionally, the topics were interesting and relevant to today's world. Finally, the skills learned through the ES program directly related to many great employment opportunities such as Environmental Law, mediation, environmental analysis, and lobbying.

The ES program at UCSB provided me with such a marvelously creative approach to thinking about problems in the world. I really appreciated the flexibility to focus on whatever outside concentration I wanted to, and also to choose between a BA or a BS. It is a program that really is what you make of it, and the small department really felt like home to me, the administrative staff and faculty were warm and wonderful and always available. Not to mention it was in Santa Barbara!

I am working in a field that is related to my major/degree. Not many people can say that anymore. The classes are diverse enough that people who are interested in the natural sciences, as well as those of us who are interested in the built environment, can never run out of interesting subjects to explore.

Positive experience that developed what I believe is an environmental ethic and desire to work to preserve what is best in our world and work to improve the rest.

I felt like I was part of something 'larger' than myself and I was proud to say that my major was environmental studies.

My experience was very good, but I worked to take advantage of what the program offers. I think that it was through pursuing internships, getting to know my professors, and choosing an emphasis of outside study that I've been fairly successful after graduation. If I could do it again, I think doing a senior thesis would have also been beneficial, to show future employers and educators that I could independently start a project and see it through to completion, in whatever area of study it be.

My experience provided the tools to succeed in the real world while fighting for what I believe in - saving the Earth. It encouraged my participation in environmental issues and was a necessary foundation for my current employment.

My experience in the ES Program provided me with the best overall education I could have asked for. I was not going into a specific field, so this broad, highly respectful approach to any productive career was imperative to my personal and institutional education.

I switched majors from the biology department to the ES program, and I found the department more welcoming to students. It seemed as if professors were more willing to talk to students and get to know them. After graduating, I truly believe the program was very rewarding in gaining a network of colleagues and figuring out more about myself.

It was great! The program allowed me the opportunity to meet many wonderful professionals and gave me the skills I needed to successfully start my career.

It was an amazing opportunity to explore numerous facets of environmental policy, law, science and philosophy. But perhaps even beyond the classroom teaching, it was the students and faculty at UCSB that really opened my eyes and mind to my future calling.

It was a very positive experience. I was very motivated and focused on Environmental issues at the time and the ES program provided a solid framework to back up my overall ideological perspective.

It opened my eyes to looking at the world in a more ecocentric way and to start thinking of how my actions will affect the world.

If hindsight is 20/20, choosing to be an Environmental Studies major at UCSB was the best decision I could have made. I feel I am a better more well rounded person for it.

I received a wonderful well rounded education that helped give me skills in dealing with people and organizations that I use even in a non-environmental field.

I liked how the major felt like a small college within the larger feel of UCSB and how close all the students and professors are with one another, both in formal and informal settings.

I found the Environmental Science experience to be excellent. The professors in the courses I took were passionate about the material being taught and encouraged learning and creativity.

As part of a triple major, it was helpful especially as I subsequently was a federal environmental manager and now a professor conducting research on environmental issues and teaching natural resources and hydrology courses.

Environmental Studies was not my first choice for a major, but it turned out to be the right choice. My experience was very fulfilling, and I am very thankful that I was able to learn so much. I think that the interdisciplinary approach that the ES major offers has helped give me an advantage in the workforce.

Fantastic! As much as I enjoyed my education in ES during my years at UCSB, I probably appreciate the value of that education more and more with the passage of time.

I enjoyed my time at UCSB. I met some wonderful friends in the ES classes. I must thank the ES program for setting me on a fulfilling career path in the non-profit sector. My first job out of school was with an environmental organization.

I thought I had the best major in the world--interdisciplinary. I found it so important to bridge the gap between science, politics, economics, etc.

I went back to school in my mid-30's so feel I got much more out of it than if I had gone in my early 20's. My experience was very positive and I left feeling inspired, energized, and ready to make a difference.

It was excellent. I left UCSD because I wasn't happy with the curriculum - too narrowly focused. I needed an interdisciplinary experience and UCSB provided it.

My experience was very good, but I worked to take advantage of what the program offers. I think that it was through pursuing internships, getting to know my professors, and choosing an emphasis of outside study that I've been fairly successful after graduation.

Course load- with the exceptions listed about, mostly inappropriate. 5 quarters of math, but only 1 quarter of diet ecology- you can tell an engineer designed these requirements. Very poor professor to student ratio. Almost all classes were taught by guest lecturers.

Excellent, with some weak points.

Excellent. Not sure it was for everyone, but I benefited greatly (in '79-'83) from the flexibility and general focus. Others would want a more specialized approach, and I gather that the program has moved this direction over the decades.

Good - a little unbalanced, as far as the political realities of development though.

Great but I feel like I didn't get to know students that well until the very end. You should have more social opportunities. My department here is very cohesive and tight, a lot of which is owed to the fact that they are a small department but get to know everyone, and offer socials outside of class.

Great!!! I loved it. Looking back, I wish I had taken more advantage of the opportunities that are available to students (internships and stuff like that), but that was my own fault. The program is great!

I regret not having been more involved in projects and internships offered.

I had a great time, met lots of great people, and learned a great deal. I did not take full advantage of the department and interning resources.

I remember being disappointed that most of the professors didn't challenge the students to think for themselves and therefore most students just ran around spouting off whatever the professor told them as 'fact'. The real world then looked at them as overzealous tree-huggers and I'm sure it hurt their employment opportunities.

I wish I would have had a double major. The program in the early 1970's was a little broad for job hunting other than as a 'planner'.

If I could do it again, I think doing a senior thesis would have also been beneficial, to show future employers and educators that I could independently start a project and see it through to completion, in whatever area of study it be.

Sometimes, I think that I did not make the most out of my time there, in that I sampled lots of different classes and had some difficulty focusing on a direction.

Very positive but a very general education that required additional education to make myself employable in the field...of course I graduated in 1983 and I know the program has changed in this direction and the field for jobs has opened up!

With the exception of the ecology classes I found the ES program to be rather general and vague. There is little focus on any one subject and the focus given to a subject is often remedial

Appendix F: List of Graduate Degrees and Profesional Certificates Obtained by ES Alumni

Title of Graduate Degrees

M.D. (Medicine)

D.V.M. (Veterinarian)

Ph.D. in Chemistry and Env. Science

Ph.D. in Economics
Ph.D. in City Planning

Ph.D. in Ecotoxicology

Ph.D. in Energy & Resources

Ph.D. in Env. Science and Engineering

Ph.D. in Forestry

Ph.D. in Geography

Ph.D. in Geography

Ph.D. in Geography

Ph.D. in History

Ph.D. in Marine Science

Ph.D. in Political Science

Ph.D. in Rangeland Ecosystem Science

Ph.D. in Rural Sociology and Women's Studies

J.D. (Juris Doctorate)

Location/School

UC Irvine

Michigan State University

Purdue University

University of Southern California

UC Berkeley Georgia Tech UC Davis

UC Berkeley

Colorado School of Mines University of Montana

UCSB/San Diego State University

University of Arizona UC Santa Barbara

University of Washington

UC Davis

UC Santa Barbara

Colorado State University Penn State University

George Washington University Law School

Georgetown University Harvard Law School

Loyola Law School, Los Angeles

Northwestern School of Law of Lewis and Clark College

Stanford Law School

University of Maryland School of Law

UC Berkeley - Boalt Hall
UC Davis School of Law
UC Hastings College of the Law
UOP McGeorge School of Law
University of San Diego

University of Southern California

Vermont Law School

Santa Barbara College of Law California Western School of Law Golden Gate University, School of Law New College of California, School of Law

University of Miami

University of Kansas School of Law

University of Oregon University of Utah

M.B.A. (Business Administration)

Boston College Santa Clara University

Golden Gate University

UCLA Anderson School of Management

Regis University

UC Davis Graduate School of Management

University of Portland Stanford University UC Berkeley M.P.A. (Public Administration)

University of Utah

San Diego State University

Tulane University

George Washington University Cal State University, Northridge

M.P.H. (Public Health) UCLA

San Francisco State University

M.I.A. (International Affairs) Columbia University

M.P.P. (Public Policy) Harvard University

London School of Economics

M.E.S.M. (Environmental Science & Management) UC Santa Barbara, Donald Bren School

M.Ed. (Education) UC Santa Barbara

University of San Francisco National University San Jose State University

M.U.R.P. (Urban & Regional Planning))

UC Irvine

M.A. in Architecture University of Oregon

University of Washington

M.A. in City and Regional Planning Cal Poly SLO (10 grads)

UC Berkeley

M.A. in City Planning San Diego State

University of Pennsylvania

M.A. in Community and Regional Planning Cal Poly San Luis Obispo

M.A. in Environmental Communications

University of Michigan

M.A. in Environmental Law, Policy and Management

University of Southern California

M.A. in Environmental Management Duke University

Brown University

Lincoln University, New Zealand

M.A. in Geography UC Santa Barbara

Univ. of Maryland

San Diego State University

M.A. in Horticulture and Agronomy (Viticulture)

UC Davis

M.A. in International Relations and Energy and Env. Studies Boston University

M.A. in Landscape Architecture Cal Poly Pomona

M.A. in Marine Conservation Ecology University of New Hampshire

M.A. in Organizational Management Antioch University

M.A. in Philosophy Cal State L.A.

M.A. in Political Management George Washington University

M.A. in Urban and Regional Planning Univ. Hawai'i at Manoa Cal Poly Pomona San Jose State University **UCLA** Wagner School of Public Service, NYU University of Washington M.S. in Aquaculture University of Stirling, Scotland M.S. in Biological Sciences CSU Sacramento Northern Arizona University Virginia Tech **UC** Riverside M.S. in Civil Engineering University of Colorado UC Riverside M.S. in Conservation Biology M.S. in Ecology Stanford University **UC** Davis M.S. in Energy and Resources UC Berkeley Univ of Colorado, Boulder M.S. in Engineering Dartmouth College M.S. in Environmental Science Yale University Monash University (Australia) Alaska Pacific University M.S. in Environmental Science and Engineering California State University Sacramento M.S. in Environmental Studies Cal State Fullerton University of Montana Missoula University of Oregon M.S. in Forest Ecology University of Wisconsin, Madison M.S. in Forest Resources and Fire Management Cal Poly, San Luis Obispo M.S. in Hydrologic Science **UC** Davis University of Wisconsin, Madison M.S. in Land Resources Management Oregon State University

M.S. in Marine Science Univ. of North Carolina, Chapel Hill

University of Michigan M.S. in Natural Resource Management

M.S. in Primate Conservation Oxford Brookes University

University of Wisconsin M.S. in Water Resources Management

M.S. in Wildlife Management University of Otago, New Zealand

M.S. Natural Resource Management Cal Poly San Luis Obispo Graduate/Profesional Certificates Location

CA Teaching Credential Chapman University

CSUN

Hayward State

CA Teaching Credential, Multiple Subject

Chapman University

UC Santa Barbara

CA Teaching Credential, Secondary CSUN

UC Santa Barbara

Certificate for streambed enhancement

Certificate in Air Quality Management UCSB Extension

Certificate in Geographic Information Systems USC

Certificate in Graphic Design UCLA Extension

Certificate in Hazardous Materials Management UCSB Extension

Certificate in Landscape Architecture UC Berkeley Extension

Certificate in Landscape Architecture Program UCLA

Certificate in Watershed Management, US EPA

Certificate of Completion in Fire Science Palomar College

Certificate in Land Use and Development Planning UCI Extension

Certificate, Negotiation and Mediation UCSB Extension

Certified Asbestos Management Planner

Certified Asbestos Project Designer

Certified Asbestos Inspector

Certified Hazardous Materials Manager Institute of Hazardous Materials Management

Certified Industrial Hygienist (CIH)

American Board of Industrial Hygeine

Certified Microsoft Systems Engineer

Certified OSHA General Industry Trainer

Certified Safety Professional Board of Certified Safety Professionals

Certified, Industrial Waste Water Treatment Operator CWEA

Certificate in Executive Management, UC Davis

PFC Certificate for Streambed Enhancement

LEED Accredited Professional

Oil Spill Control School, Texas A&M University

Outdoor Emergency Certification National Ski Patrol

Paralegal Certificiation University of West Los Angeles

Degree in Nursing Los Angeles Valley College

A.A. in Horticulture Santa Barbara City College

Appendix G: List of "Words of Wisdom" From ES Alumni to ES Undergraduates

Begin to think about where you want to go with respect to a career and get yourself started down that path with the appropriate course selections. However, don't fret too much about where you are going. Things will work out for you if you keep at it and try several potential career paths and a couple of internships in fields that you are interested in.

Try to get accepted into the honors program at UCSB. In addition to higher quality classes, you will have first pick at classes when registering. This will significantly speed your progress through school as you will get the classes you need when you need them.

Always understand the economic drivers and the tradeoffs that can contribute to win-win. Stay focused on the desired end result and then execute to achieve that result.

Carefully review when classes are offered, because several are only available once a year, this will help you to graduate on time.

Be confident in your skills and your instincts.

Be open to taking courses that you think you may not be too interested in because many of these were the courses that I learned the most from.

Become a regular at the City and/or County of Santa Barbara Planning Commission meetings. You will learn how the planning theory and environmental issues you are learning in class are implemented.

Chem 1A-C might suck, but the science skills I gained from having to take a full year of chemistry as well as Mel Manalis's environmental energy course continually pay off. Being able to not only decipher technical-speak, but to translate it for others has been highly valuable at every environmental job I've had, especially EPA-related positions.

Do a thesis, a couple of internships, as much community service as you can, and study abroad if at all possible. It really will help you figure out where you fit in the world, as well as how to live an environmentally conscious life, no matter what field you go into.

Do lots and lots of internships. They will help you know what you may be interested in doing in your future. If you find out you don't like something great...you've only wasted a school term. If you find you love something, even better. You make great professional connections, have experiences for your resume (most college grads don't have this), and you learn real world work.

Get to know your professors personally. The ES Program is blessed with professors who really care about their students.

Laugh, smile, and remember 'Home is not a place, it's wherever your passion takes you.'

Don't isolate yourself. I can't stress enough the importance of getting involved in everything the ES program has to offer. Study abroad, do an internship, join EAB etc. Most of all enjoy your time at UCSB!!!

Don't expect that your career path is going to be a linear progression like someone who joins a financial institution and works there for 20 years and gets promoted annually. In our field, now more than ever, there is a need for a mix of skill sets and just trust that each experience is preparing you for what is to come.

Don't look back. The demand for this type of knowledge will only increase.

Don't try to specialize too early - enjoy learning about the many parts of environmental studies.

At times, the courses are rough but 'hang in there.' The rewards are great at the end because you will learn so much about the world.

Environmental Studies is a calling. Write down why you feel you were called, and re-read it when you are discouraged.

Find a niche and direct your studies towards that goal. Go beyond what is required of you in the major ie. internships, thesis papers; because these are the types of things that make you more desirable in the 'real world.'

Find an interest and study it, pick a 'minor' within the major to emphasize and help further your possible job opportunities. When I graduated I felt I knew a little about everything but not a lot about any one area and therefore did not know what interested me.

Find something you find are really interesting and that you care about. Something that for which you feel passion and need no prodding to pursue. Then build your education around that. The career will follow.

Focus on as much technical skills as possible, you can gain policy experience out in the workforce. Technical skills help you get your first job.

Follow your passion. If this is what speaks to you, do it. Whether this is the field you ultimately work in or not, the learning you will receive about the inter connectedness of all things and all people will serve you well.

Get an internship. Even if it doesn't pay. Start doing hands on work in a field of interest. It's the best way to put to use all that you'll learn in the Program.

Get into an internship even if you think it will be difficult. I regret not having done that. At the time I couldn't figure how to fit it into my schedule and it probably would've changed my entire career path.

Get involved in community issues! Santa Barbara has so many things going on you need to be a part of them to gain experience!

Get involved in environmental clubs and political campaigns that will give you an understanding of how environmental issues play themselves out in the 'real' world.

Look to make a positive difference in everything you do and success and happiness will follow.

Get out there and do it all, go abroad, do internships, don't spend college in a classroom. Take advantage of these years to experience as much as you can, then figure out what classes would complement your experiences.

Go to class everyday no matter how tired, hung over, or the excuse of the day!!

I probably suggest a new student consider the program carefully before declaring the ES major. It's a great field, but it's not for everyone.

I have provided these sort of comments many times over the years, and I still firmly believe a student needs a faculty and seasoned student mentor. These two people help guide and focus the student on her or his goals and outcomes.

I wish I had taken a statistics course. I use that a lot when analyzing data. Also, public relations is important as you often have to make others aware and educate them on the issues. If you are looking to 'change the world', I suggest learning these skills.

You have to be extremely passionate about the environment in order to make it your career as opposed to a 'hobby cause.' Look at all the careers/industries you'd be qualified for and the salary range. Do an internship as early on in your studies to make sure it's really what you want to do. Your internship will get you qualified for a higher paying job once you graduate.

I would strongly recommend a double major, and/or a back ground in the sciences. The E.S. degree is a good one, but made much stronger, in my opinion, by linking it with another major like biology, economics or political science.

I wish I had taken a business class or two (in addition to the basic economics class). Even though I had no desire to run a business, you will often be encountering people who are running businesses, or you will be working in a business, or you will need to run your own business. Some background would be helpful.

If you can dream it, you can do it. I was the only woman designing and building solar and alternative buildings for a long time. I followed my heart mind and left many lasting examples of what I believed in (published books, alternative energy buildings, etc.).

Don't be afraid to break the mold and challenge the status quo. If you want to make a difference in the world, then environmental studies can lead you to a rewarding life.

If you want to work in the science sector then make sure you get a science degree! It makes a world of difference and will open the door to many more jobs.

I'll tell you what my mentor told me in grad school: focus on obtaining skills, not learning about issues. Most issues you can learn about on-the-job or through personal interest. To be an effective problem-solver, you need strong analytical and communication skills. Examples of the former include environmental impact assessment, environmental economics and valuation, cost-benefit analysis, stakeholder consultation methods, conflict resolution methods, institutional analysis, leadership or organizational change management skills, etc.

Many of my college friends in the sciences belittled my degree in ES. Upon graduation, any number of them found (interim) jobs at liquor stores and the like. On week after graduation I was in the bottom of Grand Canyon working as a field ecologist for the Museum of Northern Arizona. My ES degree was part of what got me there.

Above all, treat your opportunity as an ES Student as a positive experience and seize the chance to try to change or achieve something that you can't fail at as long as you have a solid education (confidence) and can utilize the tools bestowed upon you as a student (internships, travel, loans, professional connections, friends).

Just a reminder that the benefit you gain is closely correlated with the level of effort you put in.

Just be patient, you'll figure out what really makes you happy with time. It's o.k. to change your mind and explore other things, as long as your happy doing it.

Learn as much as you can, but do not forget that there is life after college. Your degree is only one step and it should prepare you for the next step. Consider what career you want after college so that you can focus your education towards that career.

Learn as much as you can, make all the friends that you can, have fun, study hard . . . and the rest will come.

Learn everything you can, but don't panic: you can't solve all the world's problems by yourself overnight.

Leave Santa Barbara. I think there are probably lots of jobs in the desert, but there are too few jobs here and too much competition.

Long range planning is key. Focusing too much on the next quiz/exam/final will not necessarily assist you in the long run. Explore as many career options as possible while an undergraduate. Focus on your key skills/abilities/gifts and find an occupation where they will be used.

Yours is a unique course of study - as a generalist you get to study and synthesize so many disciplines and apply them for the betterment of humankind. Not many can say that.

The resources are there for you. Don't wait for something to fall in your lap. Get an internship early, and then get another one. But remember that there is a happy balance between school and the rest of your life.

Network all the way through- meet people who do the work you are interested in, and they will tell you how they got to where they are, and give you ideas on how to get ahead, dispel untruths and tell you the how it really is- you'll get the low-down.

Understand that most of the rest of the world doesn't think like you based on their own circumstances and cultural systems and this will help you to change practices and attitudes for a better future among a broad variety of people.

Open your mind and don't just assume that the professor's opinion must be yours. There are many ways to be 'environmental' but we all have to live in the same world, so be reasonable and pick your battles carefully.

Seek experiential opportunities, don't be intimidated by professors, ask lots of questions, seek outside opportunities for field work and professional interactions, work hard, play hard

Experiment with implementing the philosophy that is taught in the classes in everyday life. Focus on the important things that will help you land a job such as strong presentation and speaking skills as well as writing skills.

Sometimes results take time. There is a fine line between thinking you can make a difference and actually making a difference. Knowing how to make a difference in a constructive way is the first step. So never be afraid to ask questions, don't be discouraged, and you will succeed.

Spend equal time in the 'real world' as you do studying the books.

Stick it out when times are tough--college is a chaotic time, especially living in IV. Take a wide range of classes so you get a taste of everything--not just those you like--it is important to get a taste of everything.

Take advantage of all that the ES Program has to offer--the faculty, the advisors, the office staff, the internships, the experiential classes, the positive atmosphere. Give your education the focused attention it requires to provide you with the knowledge, skills, and disposition required to be successful in your chosen pursuits.

Take as many courses as you can that have practical applications. Book learning is great, but one can always expand knowledge by going to the library. What is hard to substitute are the practical skills that an employer can put to use on day 1 of your employment. It will set you apart from the 100s of competitors who are aiming for the same job you are.

Learn the difference between conservation and environmentalism, there is a huge difference! Also know that you are probably at the best school in the best program of its kind in the entire country, enjoy it and make a career of it!

Talk to your professors! If you have a class that really inspires you, make time to go see your professor and they can help guide you to the potential career opportunities in that field.

The moment you declare ES as your major is the moment you begin thinking outside of the box.

This field requires a mix of passion and pragmatic application. I believe that any new student should try to develop both in their studies. The passion is necessary to help fuel those late nights preparing for a hearing or writing a technical report. The pragmatic skills are necessary to determine just what is possible (usually with not enough time) and how best to accomplish it.

This is the place to get exposed to as much diversity as you can. Take a lot of different classes. You'll find kernels of inspiration in every class, from physics to philosophy, and you might have a great teacher in a subject you thought you didn't like. That could change your life.

Tap into the wisdom of your instructors and find mentors. Make yourself known to your instructors - they can be a valuable resource. Work hard - develop writing and speaking skills. Intern if you can-this is the best way to get a job when you graduate.

If you are a new transfer, start with your lower division classes first. Not your upper division. A lesson I learned well.

Appendix H: Additional Comments From ES Alumni

As a founding member of ESA, staying involved with the ES department and UCSB has been very rewarding. It has provided me with opportunities to volunteer, communicate with faculty and staff, and network with students and alumni.

Eric Zimmerman has been great in keeping the list service going - connecting the alumni to the program, and trying to keep in touch. Thanks!

Eric Zimmerman is the man. Very helpful and most knowledgeable staff member.

Environmental Studies as a new major was a very exciting department with very dedicated and energetic faculty and staff. A bit of old school sexism on the part of a couple of the professors took a little of the shine off, but generally it was a great experience.

I found the emails from Eric Zimmerman to be useful and affective in communicating with ES students and for that I thank you Eric.

I must tell you that I commend the current Staff, especially Eric Zimmerman, for keeping on top of this Survey from past ES Alumni and Faculty. This was a wonderful idea to get us all back together for the ES 35th Anniversary. I wouldn't have wanted to miss it for the world! Thanks, Eric!

I regret that I can't join you in Santa Barbara for the 35th Anniversary Celebration. I'll be in Afghanistan working on a World Bankfunded community development project.

I sincerely appreciate the work of the ES faculty and staff! I loved my experience the program and am so happy with my education!!!

I still remember the Eric advisor-guy, what a great kid he was! Thanks for being a cool face in the sea of staff!

I thought the program was excellent. The staff was diverse and so were the courses. I loved the flexibility of choosing my areas of study.

Most of the time I worked in a business environment, around developers and - or users of natural resources (eg. timber companies, fish companies etc -- major polluters). Working with them to solve problems, rather than against them, has been the greatest education of my life. It helps to see 'the other side' so as to effect change from within as well as from outside organizations. I encourage ES students to get away from other environmentalists and work on the other side of the fence in order to learn to be truly a force in environmental change.

I was very satisfied from the time I graduated until the present (almost 30 years later !) with how the program prepared me to succeed in my professional life.

I would do anything to do it all over again!

I'd love to be a guest lecturer or course instructor at UCSB ES; then my life would be complete! By the way, my future wife was also '78 ES grad and our first son is 2001 UCSB ES grad.

It has been a pleasure to make my life here in this community and to watch the ES program grow over time.

It was really cool to meet Rod Nash, David Brower, Dave Forman, to see Tim Robbins lecture (Baskin & Robbins) and also Paul Watson!

Looking back now 24 years ago since I was an ES student, I believe that an education in Environmental Studies profoundly affected the career I chose, the passion about my work and the contribution I wish to leave.

One of the things that made the ES program great was the central gathering place of the ES library (then in Phelps), where we could hang out with our classmates, see faculty etc. It was great to have a 'home base' and was essential for instilling a sense of cohesion within the program. The faculty - especially Barry Schuyler - took such great interest in us as students. It makes such a difference when you are one student in a BIG University.

I continue to believe that a person's undergraduate education is one of the most important rites of passage in a person's life. Therefore, the education and guidance a student receives during this time is invaluable.

This is a very important discipline as the state of the environment continues to worsen. There is hope if young and bright people rise to the challenge of change, we can solve some of the problems.

Current students will hate this but I think an internship and/or senior thesis should be mandatory!

During my time at UCSB Environmental Program, there were lots of budget cuts and some courses were not available. The budget cut and lack of courses made it difficult to graduate.

I believe the ES Program has evolved and is now more technical in nature at the student's option. This would have served me well and led to even higher satisfaction.

30.

I just wish my education in the ES program was more focused. I did not realize that it needed to be and was allowed to float by without really trying to find any direction.

I know it is not the job of a university to help students find a job after college, but maybe a little more could be done to help students 'discover' what kinds of jobs are out there for ES graduates. What are the skills we should have after coming out of the ES program?

I really think the University should require all students to take at least one Environmental Studies class, as a General Ed requirement. I think it is such a good program, and particularly classes like the 11, 12, and 13 introductory series are so important to give people general knowledge about environmental issues that are facing us.

I thought the required thesis experience prepared me for graduate school.

It would be nice if the environmental studies list serve gave more job descriptions for people living outside the Santa Barbara area. I know there are some, but more would be great!

The ES program needs to provide the tools for the real world. How does the business of government relate to environmental protection and how does the development community respond to these policies? The ES program should be building bridges between the two completing interests.

Appendix I: Copy of the ES Program's 35th Anniversary Alumni Survey Form

UCSB's Environmental Studies Program 35th Anniversary *Alumni Survey*

With over 4,000 graduates it is safe to say that the ES Program at UC Santa Barbara is one of the most successful such programs in the world! As the Environmental Studies Program continues to evolve we hope that you, our alumni, will take a few minutes to help the ES faculty evaluate its successes as well as identify areas that could be improved. By completing this Alumni Survey you will provide invaluable feedback about your UCSB experience and life after graduation that will be used to ensure that the ES Program continues to be the finest undergraduate environmental studies program in the country!

If you are a graduate of UCSB's Environmental Studies Program please complete the following survey. Completion of all three parts should take no longer than 15 to 20 minutes and we thank you in advance for your time and effort. The deadline for submitting a survey is **June 30, 2005!**

The 35th Anniversary Alumni Survey is divided into three parts:

PART 1: Your basic contact information, work title and place of employment.

This information will be used to create the 2005 ES Alumni Directory. The completed directory will be made available by early summer 2005, free of charge, to all Alumni who complete the survey. (Completion of this section is required in order to submit a survey)

PART 2: Your current "Employment/Job Profile."

Although optional, we hope you will take the few extra minutes to complete this section. These profiles will provide a snapshot of the diversity of careers ES alumni have pursued and will serve as a valuable resource for current ES students by demonstrating the variety of jobs they can obtain with an ES degree. (To view an example profile, please visit: http://www.es.ucsb.edu/35/profile)

PART 3: Your education/employment history and comments regarding your environmental education while at UCSB.

Although also optional, this section provides the valuable feedback we need to properly assess the success of the ES Program.

The ES Program and ESA understand that you care how information about you is used and shared, and we appreciate your trust that we will do so carefully and sensibly. If you have any questions regarding this survey please contact the ES Program at (805) 893-2968 or by email: esinfo@es.ucsb.edu

Please return your completed survey by June 30th, 2005:

Mail: Environmental Studies Program, UCSB, Santa Barbara, CA 93106-4160

Fax: (805) 893-8686

Email: esinfo@es.ucsb.edu

Online: http://www.surveymonkey.com/s.asp?u=53457747971

Visit the ES 35th Anniversary Webpage: http://www.es.ucsb.edu/35/index.html

Part 1 of 3: Alumni Contact Information (required)

Completion of this section is required. Information provided here will be used to create the ES Program's 35th Anniversary Alumni Directory. The completed directory will be made available by early summer 2005, free of charge, to all Alumni who complete the survey. The ES Alumni Directory will include the following information: Name, Year and Quarter You Graduated, Your Current Job Title, Place of Employment, Mailing Address, Home Phone, Work Phone, Personal Email Address, and Work Email Address.

| In The ES Progr | am's 35th Alumni Dire | ectory, Plea | se Select Them | | |
|---------------------|-------------------------|--------------|-----------------|------------------------------------|--|
| | Include Home Phone # | | | | |
| | Include Personal Email | | | | |
| Do Not I Exclude | Include Mailing Address | _ | _ Do Not Includ | de My Place Of Employment | |
| Exclude | All | | | | |
| 2. First Name: | 2. First Name: 3. M | | ldle Initial | 4. Last Name | |
| 5. Maiden Name | (or other name when | at UCSB) | | _ | |
| Fall | Winter S | Spring | Summer | | |
| | arter You Cleared For | | | 7. Year Graduate: | |
| 8. Local Phone # | (area code first): | 9. Em | ail Address: | | |
| 10. Personal Wel | b Address: | | | | |
| 11. Mailing Addı | ress/Street: | | | | |
| 12. City: | | | 13. State: | 14. Zip Code: | |
| 15. What Is Your | r Current Job Title: | | 16. Name Of Co | ompany Where Currently Employed: | |
| 17. Work Phone | # (area code first): | 18. We | ork Email Addı | ress (if different than personal): | |
| 19. Web Address | s of Your Employer: | | | | |
| 20. Are You A M | ember Of UCSB's Env | rironmental | Studies Associa | ates (ESA):YesNo | |
| 21. If No. Would | You Like ESA To Send | d You A Me | mbership Pack | et:YesNo | |

Part 2 of 3: Employment/Job Profile

| to create an "Environmental Job Profile interested in learning more about the di example profile, please visit: <u>http://ww</u> | uties and re | esponsibilities (| | * |
|--|--------------|-------------------|-------------------------|------------------------|
| 22. Are You Presently Employed? | Yes | No | | |
| 23. If No, What Are You Currently Do | oing (retir | ed, grad schoo | ol, looking for employm | ent, etc.)? |
| 24. If Employed, Do You Consider Yo YesNo | our Curren | nt Employmen | t An "Environmental Jo | ob/Career?" |
| 25. If Employed, Which General EM Local government Non Government Organization | State (| Government _ | _ Federal Government | - |
| 26. If Employed, Which JOB FIELD | TITLE W | ould You Give | To Best Fit Your Curre | ent Job Description? |
| 27. Briefly Describe What Your Curro (NOTE: We Already Have The Name O | - | | | ormation From Part 1.) |
| | | | | |
| | | | | |
| 28. Briefly Describe What You Do In | Vour Curr | rent Position• | | |
| 20. Differy Describe What Iou Do III | Tour Cull | CHU I USHUUH | | |

Please provide the following information regarding your current employment. Your responses will be used

| 29. In What Approximate Range Does Your Current Annual Salary Fall: |
|---|
| \$0-20,000 \$21,000-35,000 \$36,000-50,000 \$51,000-65,000 |
| \$66,000 - 80,000 \$81,000 - 96,000 more than \$96,000 |
| 30. If You Wish To Include Any Contact Info With Your Profile So That An Interested Student May Follow Up With Questions About Your Job And/Or Career Field, Please Select Which Method(s) You Wish For Them To Use Below: |
| Home Phone # Work Phone # Work Email Personal Email Mailing Address Other (please specify) |
| Part 3 of 3: UCSB, Education, and Employment History |
| In this section you will be asked to provide information regarding your educational history, employment history and thoughts regarding your environmental education while at UCSB. Although also optional, these answers will provide the valuable feedback we need to properly assess the overall success of the ES Program. |
| 31. Did You Transfer To UCSB From Another Institution?YesNo |
| 32. If Yes, From Where: |
| 33. With Which Type Of ES Degree Did You Graduate With? B.A. (pre 1990) B.A. Natural Science Emphasis (1990-1994) B.S. environmental Studies (1994 to present) B.S. Hydrologic Sciences (1994 to present) |
| 34. Did You Graduate With a Double Major?YesNo |
| 35. If Yes, What Was Your Second Major: B.A. or B.S. Dept./Title |
| 36. Did You Complete An "Official" UCSB Minor (only available since 1995):YesNo |
| 37. If Yes, What Was Your Minor In? |
| 38. Have You Completed Or Undertaken Any Form Of Additional Education (graduate school, professional training, etc.) Since Graduating From The ES Program?YesNo |
| 39. If Yes, List The Type And Title Of Your Certificate(s)/Degree(s) And the Institution You Received Them From? |
| 40. Did You Participate In An Internship(s) While Enrolled At UCSB?YesNo |

41. If Yes, List The Name(s) Of The Agency(ies) You Interned With:

| 42. Did You Complete a Senior Thesis?YesNo |
|---|
| 43. If Yes, What Was The Title Or Subject Of Your Thesis: Was It Required Or Taken As An Elective Course: Required Elective On A Scale Of 1 (least) To 7 (most), How Beneficial Was The Experience: |
| 44. Did You Participate In Any Kind Of Study Abroad, Environmental Field Studies, Or Experiential Education Program While At UCSB?YesNo |
| 45. If Yes, Please Include The Name(s) Of The Program And Location: |
| 46. Based On Your UCSB Experience, Which Course(s) Within The ES Curriculum Did You Find To Be The Strongest/Most Beneficial? Please Explain Why: |
| 47. Which Components Of The Curriculum Did You Find To Be The Weakest (Or In Need Of Improvement) And Why? |
| 48. Please List The Skills You Find To Be The Most Useful/Necessary To Succeed In The "Real World." How May A Current Student Develop These Skills While Attending UCSB? |

| 49. How would you summarize your overall experience in the Environmental Studies Program at UCSI |
|---|
| |
| |
| |
| 50. What "Words Of Wisdom" Would You Give To A New Student Just Beginning Their Education As A Environmental Studies Major At UCSB? |
| |
| |
| |
| 51. Using A Number Between 1 And 7, Please Rank The Following Questions Based On Your Experience While An ES Student At UCSB. 1 = Lowest (least satisfied) 7 = Highest (most satisfied) |
| Your Overall Satisfaction With Your Education Within The ES Program: Your Overall Satisfaction With Your UCSB Education: The Overall Quality of the ES Faculty: The Overall Quality of the ES Staff: |
| 52. Please Provide Any Additional Comments You Wish To Make Regarding The Environmental Studie Program, This Survey, Etc. Here: |
| |
| |
| THANK YOU for taking the time to complete this survey. Please return it to the Environmental Studies |
| Program by either mail or fax by June 30, 2005 . And do visit the ES Program's 35 Anniversary/Reunion webpage for regular program updates: http://www.es.ucsb.edu/35/index.html |

Environmental Studies Program, UCSB, Santa Barbara, CA 93106-4160 (805) 893-2968 fax (805) 893-8686