

## HSU Academic Program Criteria

### Academic Program in Environmental Science

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#### I. The Vision for Humboldt State University (Limit: 2 pages) [15%]

Describe up to 5 curricular or co-curricular features of the program that are consistent with the Vision of HSU, and indicate which aspect(s) of the Vision align with that particular feature. Please provide sufficient information such that an individual unfamiliar with your program will clearly understand the feature's relevance.

- The primary emphasis of our curriculum and course content focuses on studying and improving the environment and its natural resources: Vision Statements 1 and 2.
- The ENVS major requires between 14 and 17 courses from other departments, depending on the option chosen: Vision Statement 2—“*interdisciplinary* study of the environment and its natural resources.”
- The ENVS program emphasizes, and in fact requires, a great deal of hands-on, action-oriented, work and learning from our students through outside projects, capstones, practicums and internships: Vision Statements 4 (“social and environmental responsibility and action”), 5 (“individual citizen who . . . engages in informed action”), and 8 (stewards of learning to make a positive difference”).
- Our outside projects, capstones, practicums and internships make us partners with the local communities and local tribes: Vision Statements 6 (“commit to increasing our diversity of people and perspectives”) and 7 (“partners with our communities, including tribal nations”).
- Through students clubs and organizations such as CCAT, Green Campus, Green Wheels, and Campus Recycling our students contribute to extracurricular and co-curricular learning for the students and a better environment for the campus and the community: Vision Statements 4, 5 and 8.

The only one of the eight vision statements that our curriculum does not directly address is number 3: “a regional center for the arts.”

**II. Demand (Limit: 1.5 pages per option, not including tables) [20%]**

A. Internal demand for the degree program and courses in the degree program

1. Headcount Data

<b>Major Academic Year (Fall/Spring) Average Headcount Summary</b>									
<b>Majors_overview_ENS report generated: 16-APR-08</b>									
<b>Major Code</b>	<b>Major Description</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
ENS	Environmental Science	152	159	155	132	91	82	75	94
ENSE	Environmental Sci (Ethics)- DefunctF08	52	53	53	50	53	55	46	36
ENSP	Env Sci (1st Nations Env Prot)- DefunctF08	0	1	2	1	3	4	3	5
ENST	Environmental Sci (Technology)- DefunctF08	65	59	66	66	71	62	60	61
<b>Total</b>		<b>268</b>	<b>271</b>	<b>275</b>	<b>248</b>	<b>218</b>	<b>201</b>	<b>183</b>	<b>195</b>

<b>Second Majors by Academic Year (exclusive of primary majors)</b>									
<b>Majors_overview_ENS report generated: 16-APR-08</b>									
<b>Major Code</b>	<b>Major Description</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
ENS	Environmental Science	2	2	1	2	1	1	0	0
ENSE	Environmental Sci (Ethics)- DefunctF08	0	1	3	4	2	3	2	1
ENSP	Env Sci (1st Nations Env Prot)- DefunctF08	0	0	0	0	1	1	1	1
ENST	Environmental Sci (Technology)- DefunctF08	0	0	0	0	1	1	1	2
<b>Total</b>		<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>4</b>

ENVS is the 5<sup>th</sup> largest major out of 21 in CNRS, and the 9<sup>th</sup> largest major across the university. We also note that as of Fall 2008 the headcount of majors for ENVS has increased from 195 to 218, and in Fall 2008 ENVS was listed by the Admissions Office as one of the top five majors chosen by freshmen.

Note: all of the ENVS options listed above are now defunct, and have been replaced by entirely new options (Ecological Restoration, Energy & Climate, Environmental Policy). We expect the new options to be very appealing to students, and expect the number of majors to continue to increase.

<b>Majors by Sex and Ethnicity</b>									
Majors_overview_ENS report generated: 16-APR-08									
<b>SEX</b>	<b>Ethnicity</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Female	Asian	3	5	4	7	3	5	3	3
	Black	0	0	1	1	1	1	1	1
	Hispanic	14	13	15	14	12	9	7	11
	Native Amer	2	2	5	4	4	3	3	2
	Pacific Is	2	0	0	0	0	0	1	1
	White	96	97	92	76	60	58	44	45
	Other	3	3	4	4	6	4	6	11
	Unknown	32	32	35	33	31	26	23	19
<b>sum</b>		<b>150</b>	<b>151</b>	<b>155</b>	<b>137</b>	<b>116</b>	<b>105</b>	<b>86</b>	<b>92</b>
Male	Asian	5	5	5	3	5	5	4	3
	Black	0	1	1	2	1	0	0	0
	Hispanic	11	10	8	5	6	4	8	11
	Native Amer	2	1	1	0	0	2	2	1
	Pacific Is	0	0	0	0	1	2	2	2
	White	78	77	76	61	55	53	57	63
	Other	2	4	5	7	7	7	5	7
	Unknown	22	23	26	34	29	25	21	17
<b>sum</b>		<b>119</b>	<b>120</b>	<b>120</b>	<b>111</b>	<b>102</b>	<b>97</b>	<b>97</b>	<b>103</b>

<b>Environmental Science (with options) Degrees Awarded (incl. primary and second majors)</b>									
degrees_awarded_B_ENS report generated: 25-JUN-08									
<b>MAJOR</b>	<b>AY 99/00</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 06/07</b>
Environmental Science	0	1	0	3	0	0	1	0	0
Environmental Sci (Ethics)-DefunctF08	10	12	21	25	11	29	19	16	16
Env Sci (1st Nations Env Prot)-DefunctF08	0	0	0	0	0	0	0	1	1
Environmental Sci (Technology)-DefunctF08	13	18	27	37	18	36	29	18	18
<b>sum</b>	<b>23</b>	<b>31</b>	<b>48</b>	<b>65</b>	<b>29</b>	<b>65</b>	<b>49</b>	<b>35</b>	<b>35</b>

<b>Environmental Science Degrees Awarded by Sex and Ethnicity (incl. primary and second majors)</b>									
degrees_awarded_B_ENS report generated: 25-JUN-08									
SEX	Ethnicity	AY 99/00	AY 00/01	AY 01/02	AY 02/03	AY 03/04	AY 04/05	AY 05/06	AY 06/07
Female	Asian	0	0	1	0	1	2	2	0
	Hispanic	1	2	4	2	2	4	0	2
	Native Amer	0	0	0	0	0	0	1	2
	Pacific Is	0	0	0	1	0	0	0	0
	White	6	8	17	24	6	23	15	9
	Other	0	1	1	1	0	4	0	0
	Unknown	0	5	6	8	5	7	10	3
<b>sum</b>		<b>7</b>	<b>16</b>	<b>29</b>	<b>36</b>	<b>14</b>	<b>40</b>	<b>28</b>	<b>16</b>
Male	Asian	0	1	1	1	0	1	1	1
	Black	0	0	0	0	0	1	0	0
	Hispanic	4	1	4	3	0	3	1	1
	Native Amer	0	0	0	1	0	0	0	0
	Pacific Is	0	0	0	0	0	0	0	1
	White	8	10	11	16	11	13	12	7
	Other	1	0	0	2	0	0	2	0
	Unknown	3	3	3	6	4	7	5	9
<b>sum</b>		<b>16</b>	<b>15</b>	<b>19</b>	<b>29</b>	<b>15</b>	<b>25</b>	<b>21</b>	<b>19</b>

## 2. FTES by Course Code

<b>FTES taken in Environmental Science classes by Majors (AY 02/03 - AY 07/08)</b>								
course_ftes_smry_ENVS report generated: 30-JUN-08								
SUBJ	Course level	Student Major	AY 02/03	AY 03/04	AY 04/05	AY 05/06	AY 06/07	AY 07/08
ENVS	Lower-div	Nat Resources Plng & Interptn	.0	.2	.0	.0	.0	.0
		Undeclared	.0	.1	.2	.0	.0	.0
		Forestry	.0	.0	.3	.0	.0	.0
		Zoology	.0	.0	.1	.0	.0	.0
		Wildlife	.0	.0	.5	.0	.0	.0
		Biology	.0	.0	.1	.0	.0	.0
		Environmental Science	.0	.4	.4	.0	.0	.0
	<b>Sub-total</b>		<b>.0</b>	<b>1.0</b>	<b>1.7</b>	<b>.0</b>	<b>.0</b>	<b>.0</b>

FTES taken in Environmental Science classes by Majors (AY 02/03 - AY 07/08)								
course_ftes_smry_ENVS report generated: 30-JUN-08								
SUBJ	Course level	Student Major	AY 02/03	AY 03/04	AY 04/05	AY 05/06	AY 06/07	AY 07/08
ENVS	Upper-div	Environmental Science	13.6	13.4	12.1	11.1	5.7	4.6
		Undeclared	.4	.4	.2	.2	.6	.4
		Art	.5	.4	.7	.6	.2	.3
		Biology	.3	.7	.9	1.3	.3	.2
		Geography	.3	.1	.5	.2	.2	.2
	<b>Sub-total</b>		<b>20.0</b>	<b>20.8</b>	<b>22.9</b>	<b>21.6</b>	<b>12.4</b>	<b>7.7</b>

FTES taken in Environmental Science classes by Majors (AY 02/03 - AY 07/08)								
course_ftes_smry_ENVS report generated: 30-JUN-08								
SUBJ	Course level	Student Major	AY 02/03	AY 03/04	AY 04/05	AY 05/06	AY 06/07	AY 07/08
ENVS	All Levels	Environmental Science	13.6	13.8	12.4	11.1	5.7	4.6
		Undeclared	.4	.5	.4	.2	.6	.4
		Art	.5	.4	.7	.6	.2	.3
		Biology	.3	.8	1.0	1.3	.3	.2
		Geography	.3	.1	.5	.2	.2	.2
<b>Total</b>			<b>20.0</b>	<b>21.8</b>	<b>24.7</b>	<b>21.6</b>	<b>12.4</b>	<b>7.7</b>

3. Service to other HSU program/options

*Document other HSU programs/options (including, GE) with required coursework from your program*

Course Dept	Course #	Course Name	Units	Requiring Major/Minor
Environmental Science	308	Ecotopia	3	Environmental Ethics - Minor
	309	Environmental Conflict Resolution	3	Environmental Ethics - Minor Forestry
	400	Inscape & Landscape	3	Environmental Ethics - Minor
	412	Legal Research	4	Criminal Justice - Minor

4. Comment on the internal demand **FOR EACH OPTION** of the Major. Explain any significant changes in internal program demand over past 7 years. Provide any additional relevant information of internal demand.

ENVS is the 5<sup>th</sup> largest major out of 21 in CNRS, and the 9<sup>th</sup> largest major across the university. As of Fall 2008 the headcount of majors for ENVS has increased from 195 to

218, and in Fall 2008 ENV5 was listed by the Admissions Office as one of the top five majors chosen by freshmen.

The data shown in the tables above are based on the now-defunct options in ENV5. In those options, there were only two true ENV5-prefix courses—the senior capstone courses of Sustainable Campus and Practicum (students took one or the other). The rest of the old curriculum consisted entirely of courses from other programs. That explains the total FTES of 7.7. The new curriculum, beginning Fall 2008, has a sequence of Freshman through Senior ENV5-prefix core courses. Several of these new courses are also slated to be included in a proposed new major in Environmental Studies.

The large number of ENV5 students taking courses required for their ENV5 major from other departments increases the enrollment of courses in those other departments, helping those programs keep breadth and depth in their curriculums.

#### B. External demand for “graduates” from the program

Imagine you are answering a parent’s question about job prospects and the demand for graduates of your program/option. Describe evidence of external demand for this program. Evidence may be cited from one of the following sources: the State of California <http://www.labormarketinfo.edd.ca.gov/>, the US Department of Labor <http://www.bls.gov/OCO/>, the National Association of Colleges and Employers, <http://naceweb.org>. Evidence may be cited from an additional source from, for example, a professional society relevant to your discipline.

When referencing the web sites listed above, we find that occupations for the ENV5 options fall into the category of Environmental Scientist. Below is the 2006-2016 projected job growth rate for California, which is characterized as above average.

Environmental Scientists            +26% California

The new options in ENV5 were designed with career opportunities and demand for graduates in mind. We believe that students graduating from these new options (Ecological Restoration, Energy & Climate, Environmental Policy) will be in great demand, particularly in California.

### III. Program Quality (Limit: 6 pages, not including tables) [30%]

#### A. Students

##### 1. For undergraduate programs

<b>Environmental Science (with options) Mean GWPE Scores (incl. primary and second majors)</b>								
degrees_awarded_B_ENS report generated: 25-JUN-08								
<b>MAJOR</b>	<b>AY 99/00</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>
Environmental Science		16.0		19.0			18.0	
Environmental Sci (Ethics)-DefunctF08	15.7	17.3	16.2	16.6	17.0	17.3	17.3	17.3
Env Sci (1st Nations Env Prot)-DefunctF08								14.0
Environmental Sci (Technology)-DefunctF08	16.8	16.5	16.2	16.1	17.1	17.1	16.7	16.7
Overall	16.3	16.8	16.2	16.4	17.0	17.2	17.0	16.9

Provide evidence indicative of program quality related to student learning (e.g., patterns of student achievements in discipline-specific contexts such as special honors or awards, publications, presentations; passing rates on professional examinations; proportion of students who are admitted to graduate school and/or employed in a disciplinary field; and so on – as appropriate for your discipline).

Students and faculty have received many letters of recognition for student work in the senior practicum classes from the “clients” of those courses, including local county government, state and federal government agencies, not for profit organizations and businesses. While we do not keep quantitative records of alumni, anecdotal evidence suggests that many of our ENVS graduates find employment with California state resource agencies, with environmental consulting firms, and in the non-profit sector.

#### B. Faculty

1. Provide evidence of teaching effectiveness and commitment to continuous improvement of teaching. Include, for example, engagement in professional development for teaching (including around campus themes on learning outcomes and diversity, and on accessibility training), program approaches to ensure quality, and/or recognitions, honors, and awards for excellence in the classroom as appropriate for your program.

There were no FT faculty in the program for the time period under review. The only faculty position in this program for the past three years was a FERP faculty whose appointment was less than 0.5.

- Evidence of faculty engagement in scholarship/creative activities and service. (Express as a percentage of full-time or FERP faculty members **affiliated with the program**. For example, if 9 of 10 faculty affiliated with your program gave a paper at a professional meeting in 04/05, then enter  $9/10 = 90\%$ .) This table is to be completed by the department.

Scholarship/Creative Activities/Service	05/06	06/07	07/08
At least one peer-reviewed publication or creative product			
At least one funded grant or contract related to scholarship			
Invited participant or leader of workshops, expert panels, or task forces			
At least one presentation (paper, poster, exhibition, etc.) given at a professional society meeting			
Professional service activities at a regional or national level			
Service on at least one university or college-level committee (at least 1 hour/wk avg.)			

- Provide explanations of the data above and/or descriptions of the patterns of faculty engagement in scholarly and/or creative activities and service as appropriate for your program.

There were no FT faculty in the program for the time period under review. The only faculty position in this program for the past three years was a FERP faculty whose appointment was less than 0.5. Therefore there is no data to report.

- Provide evidence for faculty mentoring of students. Include, for example, approaches to advising, directed study or research, and/or clubs or student professional chapters that involve faculty mentorship.

Every student in the department must make an appointment and sit down face to face with his or her advisor every semester for an advising session before receiving their registration access code. We use this appointment to update the student's progress toward degree completion and assist in preparation of a schedule for successful completion of their program of study. We have developed advising sheets for each option to facilitate students understanding which classes they need and which they have completed for both major and GE requirements. We also often meet with students individually to assist in preparation of resumes and job applications.

Dr. Hansis has advised a number of Interdisciplinary Studies students.

Dr. Hansis directs internships for CCAT and Green Campus, and has served on the CCAT Advisory Board.

5. Other evidence of quality indicators related to faculty that may not be listed elsewhere, including, for example, faculty diversity within the program.

There were no FT faculty in the program for the time period under review. The only faculty position in this program for the past three years was a FERP faculty whose appointment was less than 0.5.

### C. Curriculum (differentiate by option, if appropriate)

1. Writing and oral communication learning outcomes

*Describe how written and oral communication skills are included in your program.*

One of the learning outcomes for ENV5 students is that they “develop writing, speaking, and electronic communication skills needed to communicate with the public and professionals concerning the environmental sciences.” This outcome is an explicit focus of several of the ENV5-prefix courses.

2. Assessment

[Data on program progress with assessment tasks will be provided from the Faculty Associate for Assessment]

*Provide 2 examples of how you have used results of assessment of your program’s student learning outcomes to adapt, enhance, or affirm your program’s curriculum.*

Fall 2008 is the first semester of the new curriculum, therefore we are just beginning the assessment process. We have identified (and published in the HSU catalog) the learning outcomes for the major; we have mapped those learning outcomes onto the ENV5-prefix courses, and have mapped the HSU learning outcomes onto the ENV5-prefix courses. We are currently developing our assessment plan for ENV5 and will begin assessment of the new curriculum this semester.

3. Accreditation (if applicable)

*If the program is accredited, describe the need for this accreditation and its impact on the quality and composition of the curriculum of the program.*

N/A

4. Relevance and innovation

*Provide evidence through examples that demonstrate a curriculum that is relevant, innovative, forward looking, responsive to changing trends, and equips students to function in a diverse, global context.*

We just had a new curriculum approved and put in place beginning Fall 2008. This new curriculum was developed by an interdisciplinary committee with representatives from all three colleges. We included 11 new courses developed specifically for the major (including 5 in other departments), which is something the ENVS major had not ever had before. The options in Energy & Climate, Ecological Restoration, and Environmental Policy were specifically chosen and developed with relevance, innovation, forward thinking, and responsiveness to changing trends in mind. It is difficult to imagine a curriculum with more of these qualities than the new ENVS curriculum.

5. Interactions between graduate and undergraduate programs (if applicable)  
*If this is a graduate program, what opportunities for undergraduates result (or are lost) by virtue of the graduate program.*

N/A

6. Program uniqueness  
*If your program provides unique educational opportunities or course content that is found at few or no other CSU institutions, please describe this uniqueness.*

Although Environmental Science is not a program unique in the CSU system, what is different about our ENVS program is that it offers such a rich breadth of environmental-related courses not found at other campuses. Most other campuses have ENVS programs similar to what we previously had – a patchwork of courses from other departments recombined into an ENVS program, with few if any courses developed specifically for the program. At HSU we also have a much richer breadth of courses in the natural sciences from which to draw on for the ENVS program, as well as environmentally themed courses in programs as varied as Geography, Political Science and Economics (just to name a few). Although it is hard to keep track of exactly what the other ENVS programs in the CSU are doing, we believe our options in Energy & Climate and Ecological Restoration are unique.

7. Opportunities for undergraduate scholarship/creative activities/service  
*Estimate the percentage of your undergraduate majors that participate in scholarship/creative activities/professionally-related service, and provide some illustrative examples of such activities. Can students receive academic credit for these activities and have them counted toward undergraduate major requirements?*

All of the options in ENVS require a senior capstone or practicum experience in which students typically work in small groups on a semester-long project for an outside client, designing, creating and producing a professional product. Students receive academic credit

for these activities and they are counted toward their undergraduate major requirements. We could provide a lengthy list of such projects that the current faculty have overseen, but just the list along would be several pages long. Just a very few examples include:

- 100% recycled paper in all campus copiers (the only such campus in the CSU); this was the result of an ENVIS Sustainable Campus practicum project.
- The Alternative Transportation Club, later renamed Green Wheels, spun off a community-based group that works on alternative transportation in Humboldt County.
- The “green” cleaning products used in residence halls are the result of a Sustainable Campus practicum project.
- Students in ENVIS Practicum researched alternative programs that communities can join to help them reduce the carbon footprint of the community. As a result, Humboldt County elected to joined ICLEI as the most effective approach to reducing Humboldt County’s greenhouse gas emissions.

#### D. Affiliations/Equipment/Facilities/Environment

##### 1. Affiliations

*Some academic programs are affiliated with on-campus or off-campus centers, units or institutes that bring important benefits to programs. For any such center/unit/institute, please provide (1) the name of such center/unit/institute, and very brief descriptions of (2) the purpose of the center/unit/institute, (3) the nature of your program's affiliation with the center/unit/institute, and (4) the benefits accruing to your program/major from your affiliation with this center/unit/institute.*

*Units/centers/institutes may be public (HSU, CSU, local, state, federal) or private.*

The ENVIS program has always had a strong affiliation with the CCAT, Green Campus, Green Wheels, and Campus Recycling programs.

##### 2. Facilities and resources

*Provide a brief listing of your most important facilities, equipment and information/library resources, and describe the degree to which the current facilities, equipment and information/library resources affect program quality.*

Unfortunately, ENVIS has few facilities and resources to call its own. The program has access to equipment in the Natural Resources and Forestry stockrooms.

##### 3. Unique local and regional environment

*Describe how the program takes advantage of the unique local or regional social, cultural and/or natural environment available to students and faculty at HSU. (Do not include items listed under DI.)*

Multiple field trips in virtually every one of our upper division courses utilize the local natural environment (forests, marshes, streams, parks, wildlife refuges, farms, etc.) as a

living laboratory. Students may, just to name a few examples, collect mapping data for analysis of these environments, learn about restoration and management issues, collect physical and biological data for analysis in the lab, create and conduct interpretive and educational walks, collect data on human use of and impacts to these environments, and do reflective writing after spending time in the local environment.

Most of our upper division courses (i.e. the vast majority of our curriculum) are structured to include a weekly laboratory. Due to HSU's unique location, a variety of natural environments, working landscapes and rural communities lie within close range. Our students use this opportunity to gain field experience in local ecosystems ranging from redwood and mixed conifer forests, creeks and wetlands, marshes and coastal dunes. We visit working forests, ranches, farms and ecological restoration sites. In the process, our students interact with a range of professionals including agency staff, land managers, researchers, non-profit leaders, elected officials and private land owners.

**IV. Investments, Revenues, and Efficiencies (Response Limit: 2 pages of narrative, not including tables) [20%]**

A. Program Investments

1. Program Investment – Degree Requirements

*Enter the total number of required course units (as listed in the catalog) for this academic program, and then the number of required course units for this academic program that are from the primary course code associated with your program. Provide a total for each option if appropriate.*

Student Units

ENVS Policy option

Total required Program SCUs	95	Required Program SCUs in the primary Course Code	16
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Note: 30 units double-count as GE, for a net of **65 units**.

Note: There are zero (0) required units unique to this option.

ENVS Restoration option

Total required Program SCUs	94	Required Program SCUs in the primary Course Code	22
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Note: 27 units double-count as GE, for a net of **67 units**.

Note: There are only 6 required units unique to this option.

ENVS Energy & Climate option

Total required Program SCUs	89	Required Program SCUs in the primary Course Code	16
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Note: 27 units double-count as GE, for a net of **62 units**.

Note: There are only 15 required units unique to this option.

## Weighted Teaching Units (WTU's)

*Total the number of WTUs required to teach 1 section of each of the required courses in the program. If there are lists of restricted electives (e.g., take 1 of the following 3 courses), then choose a representative course from the list. For required S-factor courses, estimate the typical number of WTU's assigned to a faculty member who teaches the course. Again, differentiate by option if appropriate.*

### ENVS Policy option

Total Required Program WTUs	103	Required Program WTUs in the primary Course Code	18
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Note: There are zero (0) WTUs unique to this option.

Note that the vast majority of this option consists of courses already being offered by other departments for their programs.

### ENVS Restoration option

Total Required Program WTUs	114	Required Program WTUs in the primary Course Code	26
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Note: There are only 8 WTUs unique to this option.

Note that the vast majority of this option consists of courses already being offered by other departments for their programs.

### ENVS Energy & Climate option

Total Required Program WTUs	99	Required Program WTUs in the primary Course Code	18
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Note: There are only 19 WTUs unique to this option.

Note that the vast majority of this option consists of courses already being offered by other departments for their programs.

Program investment – by Minimum Weighted Teaching Units required to offer coursework so students can make reasonable progress toward their degree.

*Complete the table below using the definitions that follow. Include additional columns as needed for additional options.*

Total WTU in Course Code	WTU for GE and service to other academic Programs	WTU for ENVS Policy	WTU for ENVS Restoration	WTU for ENVS Energy/Climate
56	0	30	46	30

- Explanatory note: Since the ENVS curriculum from the past two years no longer exists, and since the ENVS curriculum from those years had only two purely ENVS-prefix courses, I have instead included a projected two-year plan (2008-09 and 2009-10) based on the current ENVS curriculum.

*Total WTU in Course Code: Sum up the total number of WTU that were used to teach courses in the primary course code associated with your academic program over the past two academic years. Exclude remedial courses.*

*Service to GE and other Academic Programs: Enter the total number of WTU that were used over the past 2 years to meet service demands imposed by students outside the major. (In other word, if 8 sections of Egyptology 301 have been offered over the past 2 years, but if 2 sections over the past 2 years would have been sufficient for the Egyptology majors, then count 6 sections of Egyptology, and the associated WTU, in this category.)*

*WTU for Major Option (s): Sum up the non-service WTU for the set of courses in the course code associated with your program that you would need to offer over a two year period to accommodate progress toward degree for your program students.*

*Notes: 1) In programs with multiple options, courses common to the multiple options should be included in all options. Hence the entries to the right of the “Total” entry will not sum to the total. 2) Do not pro-rate WTU’s by the percentage of students in a particular section of a course that are majors. Include the course in the count if it must be offered during a 2-year period for students to make progress toward their degree. The 4-year major plan for Freshmen may be useful.*

2. Program Investments – by staff allocations.

*Estimate the percent of departmental expenditures for staff positions that can be attributed to this academic program. Provide an explanation, as appropriate.*

	Major Program
Percent of Staff FTEF	50%

ENVIRONMENTAL & NATL RES SCI	Count	Sum	Count	Sum	Count	Sum	Count	Sum	Count	Sum
R07	2	1.00	2	1.50	2	1.50	2	1.50	2	1.50

Half of staff time for NRPI; half for ENVIS. However please note that the department staff (1.5) shown above and attributed to ENRS alone is in fact shared by both the ENRS Department and the Oceanography Department.

3. Program Investments – Other annual costs.

*Provide dollar estimates for other program costs by the following categories. Annualize periodic costs (equipment purchases or facilities upgrades) as necessary. Include an explanation, if appropriate. Do not include costs for commonly used items (smart classrooms, faculty workstations, etc.).*

Category	Estimated Cost
Equipment (including maintenance)	\$15,000 one-time start-up for new faculty
Instructional Supplies	
Temporary Help (graders, lab assistants, GA's, etc.)	

4. Program Investments – accreditation [if applicable]

*If this program is accredited, describe how this accreditation effects program costs.*

B. Gross Revenues

<b>Revenue</b>			
<b>DEPARTMENTS COMPLETE THIS SECTION</b>	05/06	06/07	07/08
Fundraising/donations			
Extended Education			
Student fees			
Instructionally Related Activities (IRA)			
Instructionally-related grants			
Grants and contracts to P.I.s			
Other revenues			

*Provide an explanation for how these revenues support the academic program.*

There were no FT faculty in the program for the time period under review. The only faculty position in this program for the past three years was a FERP faculty whose appointment was less than 0.5. For some of these lines it is difficult to separate out NRPI revenue from ENV5 revenue.

C. Efficiency

1. Efficiency – By SFR for course code

Academic Year Averages	Subject	02/03	03/04	04/05	05/06	06/07	07/08
SFR	ENV5	#N/A	#N/A	#N/A	0.00	7.33	5.31
FTEF	ENV5	1.08	1.03	0.87	0.44	0.52	0.40

<b>SFR SUMMARY</b>	02/03	03/04	04/05	05/06	06/07	07/08
<b>AHSS</b>	20.36	22.05	21.94	20.61	21.19	22.91
<b>CNRS</b>	15.66	16.90	17.17	16.04	16.82	18.28
<b>CPS</b>	15.12	16.29	15.68	15.22	20.80	25.33
<b>UNIVERSITY TOTALS</b>	17.28	18.65	18.57	17.52	19.32	21.43

*Explain any substantial changes in SFR. Also explain why this SFR differs from the college and/or university SFR. What efforts have been made over the past few years by the program to improve this measure of efficiency? Use the data under part IV.E. as appropriate.*

The SFR data listed in the table above are wildly incorrect. The correct numbers, taken directly from the SFR data sheet provided to us by the Task Force, are:

02/03 = 18.66  
03/04 = 21.22  
04/05 = 28.39  
05/06 = 49.66 (sic?)  
06/07 = 24.08  
07/08 = 19.34

While these are impressive SFR numbers for the CNRS, in all fairness we must remember that they are based on the previous curriculum. There is no way of knowing if the new curriculum will generate similar SFRs.

2. Efficiency – Other views.

The Prioritization Task Force will examine the data given under section IV.A and B in terms of the overall production (e.g. number of majors, number of graduates) in the program. Please comment if appropriate.

D. Budget cut impacts

*Indicate how your program has been affected by recent (since 2002-2003) budget cuts that have directly affected resources for your program (faculty, staff, operating expense) and course offerings (class size, reduced course offerings or options for the major.) Refer to the data included under section IV. E. or in the departmental report as appropriate.*

We have doubled the section sizes for two courses cross-listed as NRPI and ENVS courses: 309 and 400. Both were increased from 35 to 70.

Advising loads grow ever larger as there are fewer full-time faculty in the ENRS department to serve as ENVS advisors.

With no faculty at 0.5 or greater, and only two purely ENVS-prefix courses in the old curriculum, there wasn't much of a budget to cut.

E. Additional Data

<b>Course Offerings Profile in Environmental Science (AY 00/01 - AY 07/08)</b> class_offerings_ENVS report generated: 27-JUN-08								
	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Distinct Courses Enrolled	3	4	5	6	5	5	4	2
Sections Enrolled	5	8	9	10	11	9	7	5
Average Section Enrollment	13	10	12	14	17	16	13	17
<b>Distinct Courses Enrolled in Environmental Science by Level (AY 00/01 - AY 07/08)</b> class_offerings_ENVS report generated: 27-JUN-08								
<b>Course Level</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Lower-div	0	0	0	1	1	0	0	0
Upper-div	3	4	5	6	5	5	4	2
<b>Total</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>2</b>
<b>Sections Enrolled in Environmental Science by Level (AY 00/01 - AY 07/08)</b> class_offerings_ENVS report generated: 27-JUN-08								
<b>Course Level</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Lower-div	0	0	0	1	1	0	0	0
Upper-div	5	8	9	9	10	9	7	5
<b>Total</b>	<b>5</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>5</b>
<b>Avg Section Enrollment in Environmental Science by Level (AY 00/01 - AY 07/08)</b> class_offerings_ENVS report generated: 27-JUN-08								
<b>Course Level</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Lower-div				28	51			
Upper-div	13	10	12	14	16	16	13	17
<b>Total</b>	<b>13</b>	<b>10</b>	<b>12</b>	<b>42</b>	<b>67</b>	<b>16</b>	<b>13</b>	<b>17</b>
<b>FTES in Environmental Science by Course Level (AY 00/01 - AY 07/08)</b> class_offerings_ENVS report generated: 27-JUN-08								
<b>Course Level</b>	<b>AY 00/01</b>	<b>AY 01/02</b>	<b>AY 02/03</b>	<b>AY 03/04</b>	<b>AY 04/05</b>	<b>AY 05/06</b>	<b>AY 06/07</b>	<b>AY 07/08</b>
Lower-div	.0	.0	.0	1.0	1.7	.0	.0	.0
Upper-div	12.4	13.6	20.0	20.8	22.9	21.6	12.4	7.7
<b>Total</b>	<b>12.4</b>	<b>13.6</b>	<b>20.0</b>	<b>21.8</b>	<b>24.7</b>	<b>21.6</b>	<b>12.4</b>	<b>7.7</b>

**NOTE:** In the above tables all class sections have 2 or more students enrolled. This is done to minimize the influence of independent student sections.

Distinct Courses count each distinct SUBJ/Course-number combination enrolled.

All figures are Fall/Spring term averages. Due to the rounding of average Academic Year counts, the various breakouts may not add to the exact same amounts.

### Other Class Offering Breakouts

These examine independent study sections, and sections by different modes of instruction. The Lecture-only sections have only a C1 through C6 mode. The Lab/Activity-only sections have only a C7 through C-16 mode. Other modes and combinations contain the remaining modes or combinations of lecture and lab/activity modes.

<b>Other Special breakouts in Environmental Science (AY 00/01 - AY 07/08)</b>								
class_offerings_ENVS report generated: 27-JUN-08								
	AY 00/01	AY 01/02	AY 02/03	AY 03/04	AY 04/05	AY 05/06	AY 06/07	AY 07/08
Sections with 1 student enrolled	3	1	8	1	1	2	0	1
Lecture only sections	4	5	5	5	7	5	4	4
Lab/Activity only sections	0	0	0	0	2	0	0	0
Other modes and combinations	1	4	4	5	2	4	3	1

### V. Potential (Please complete this section for each option. [15%])

#### A. Program capacity with existing resources:

1. What is your program's maximum capacity with current resources? Use two metrics to define "capacity": The number of graduates per year, and the number of FTES generated by courses that are unique to this option, per year.

(Completed by the department)	Graduates per year	FTES in the major option per year
Existing	35	7.7 <sup>2</sup>
Maximum capacity with existing resources <sup>1</sup>	70	70.0 <sup>2</sup>

2. If your program is at maximum capacity, proceed to part B. If you have capacity to grow with existing resources, what steps have been taken to increase enrollment? What have been the effects of these steps, and what results are still anticipated?

<sup>1</sup> The maximum capacity shown above depends on replacing Dr. Hansis when his FERP ends in another year.

<sup>2</sup> The reason for the large difference between "existing" (past) and maximum FTES is that the old curriculum had only two purely ENVIS-prefix courses, while the new curriculum has eight. Five of the six new ENVIS courses can accommodate relatively large section sizes.

We work closely with the NR recruiter Lisa Perry to give presentations to visiting high school and JC groups (e.g. this week to a group of Environmental Academy high school students from the East Bay, and next week to a group of environmental students from a community college in southern Oregon).

B. Opportunities for future growth or substantial curricular changes

1. What opportunity does the program have for future expansion? Provide evidence for your response.

We just accomplished our expansion and are not anticipating further expansion any time soon.

2. Describe the curricular changes and/or staffing increases required to accomplish such an expansion?

N/A

C. Impact of augmented resources

*Suppose that your program were ranked in a category that recommended augmentation of resources. What would be the impact of augmented resources? (Answer for a 10% augmentation and a 20% augmentation.)*

First, we would like to state our assumption that replacing Dr. Hansis when his FERP ends next year is not considered an “augment.” If we were truly able to augment the program with another faculty position, we could develop additional option-specific courses in the Restoration and Policy options.

D. Impact of reduced resources

*Suppose that your program were ranked in a category that recommended reduction of resources. What would be the impact of reduced resources? (Answer for a 10% reduction and a 20% reduction.)*

If we are not able to replace Dr. Hansis when his FERP ends, we will once again be back to having a program with over 200 majors and only one faculty member, which is untenable.

E. Impact of program elimination

*Suppose that your program were recommended to be discontinued. What would be the impact of program elimination?*

We would lose a program that is not only perfectly aligned with the University’s mission and vision, but is also one of the largest draws of the programs on campus.

**VI. Additional Information (Limit: 1 page) [up to 5 extra credit points may be assigned to the overall score]**

*Provide crucial information that is not provided under the previous categories.*

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This has been a difficult report to compile, as I'm sure it is difficult to score, because of the fact that 1) we have had no (zero) full-time faculty in the program over the past several years, making it close to impossible to accomplish anything beyond the bare minimum of staffing the two ENVS prefix courses that existed in the old curriculum; and 2) the data in the template is from a curriculum that no longer exists.

On a positive note, however, we have had the addition of a new faculty position beginning Fall 2008, and there seems to be a lot of interest in the new ENVS options implemented this semester. We predict that this interest will translate into significant growth in the major, and, we hope, some additional resources to fuel that growth.

## **APPENDIX**

### *HSU Vision Statement*

1. Humboldt State University will be the campus of choice for individuals who seek above all else to improve the human condition and our environment.
2. We will be the premier center for the interdisciplinary study of the environment and its natural resources.
3. We will be a regional center for the arts.
4. We will be renowned for social and environmental responsibility and action.
5. We believe the key to our common future will be the individual citizen who acts in good conscience and engages in informed action.
6. We will commit to increasing our diversity of people and perspectives.
7. We will be exemplary partners with our communities, including tribal nations.
8. We will be stewards of learning to make a positive difference.