

University of Nevada Reno

Environmental Science Graduate Program

External Review Final Report of
University of Nevada Reno Program, April 1st

And

Responses to External Review
Recommendations



2008

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Environmental Science Graduate Program

External Reviewers:

Dr. Karen Mancl,
Professor – Food, Agricultural & Biological Engineering
Director of Environmental Science Graduate Program,
The Ohio State University

Dr. Elizabeth Wattenberg
Associate Professor and Director of Graduate Studies
Division of Environmental Health Sciences
School of Public Health
University Of Minnesota

Comments from the External Review Team:

Overall assessment

- Very positive program has more strengths than weaknesses
- Most weaknesses in the program can easily be addressed

Strengths

Curriculum

Flexibility, as expressed by students, faculty and alumni, is the strength of the program. The flexibility in curriculum is well-suited to the dynamic nature of the environmental issues that faculty are studying and sponsors are funding. Students, with the help of their advisors, are able to put together a course of study that provides them with a strong foundation in science and supports their research and career interests.

Efforts should be made to maintain and promote the flexibility in the program.

Student life

Students and alumni love the program. They are enthusiastic and thrilled they chose the Environmental Science program at UNR for their graduate education. This is a wonderful testimony to the program. Alumni left the program with a strong foundation in the sciences and were ready to move into careers in the environmental field. Students enjoy the attention from faculty and noted a good student/faculty ratio in their classes.

“Student placement appears to be high.”

Student placement appears to be high. Every group the review team met with talked about the ease with which students find jobs. Student placement needs to be documented because it is part of the program mission statement:

“The program prepares graduate students for challenging positions in academia, government and private industry to recognize environmental hazards, to protect human health and to improve environmental quality.”

“Students have access to scientists and facilities of the DRI.”

Students have access to the scientists and facilities of the DRI. This close association is an excellent opportunity for students to experience the world of environmental science beyond the university.

The program should foster student contact with the DRI. With a bus stop at the DRI parking lot, it should be easy to hold classes and student events at DRI.

Administration

The program is fortunate to have a dedicated director and a history of committed directors. Directing interdisciplinary programs can be a thankless job, and is thought to distract a faculty member from department responsibilities. However, contact with interdisciplinary students is extremely rewarding and stimulating to the Director. These students “*want to solve the world’s problems and want to do it next semester.*” The drive to make a difference and their environmental ethic help faculty stay on the cutting edge.

“The long legacy of interdisciplinary education sets UNR apart.”

We learned from the Executive Director of the newly formed Academy for the Environment, that UNR has an environmental emphasis throughout the institution. If this is the case, the environmental science graduate program is an important contributor to this emphasis. If this emphasis continues, future faculty hires should support the environmental emphasis throughout the institution.

The long legacy of interdisciplinary education sets UNR apart. Faculty and university leadership is accustomed to supporting graduate programs that cut across department and college lines. It is important that new administrative hires be welcomed into the interdisciplinary environment as a benefit to their unit.

Faculty involvement

Faculty are successful in obtaining research grants to support environmental research. They are committed to involving graduate students in their research. Faculty, both at UNR and DRI, want and can support more students. High quality graduate students are considered essential to a strong research and grants program. As costs to support graduate students have risen at other institutions, many faculty have moved to technicians and post-docs to staff their labs. UNR appears to be a favorable graduate research environment.

The university/DRI relationship offers access to more faculty, projects and facilities for students. The faculty at DRI want to work with students and teach graduate level classes.

“The faculty at DRI want to work with students and teach graduate level classes.”

Climate

The interdisciplinary climate throughout the nation and among sponsors and employers is strong. Professionals with skill sets that cut across disciplines are in demand. Real issues are not discipline centered, so students who are comfortable working with people from a range of backgrounds can be extremely effective at their work. UNR already has what many institutions are trying to create. Nevada has so many critical environmental concerns. This creates a rich research environment for faculty and students. Addressing important problems to Nevada citizens enables UNR to show the state leaders how their investment in higher education benefits the state.

Weaknesses

Communication

The graduate web site is broken, and is a critical weakness. Students learn about graduate programs through the internet. A web site is the most important recruitment tool for any program. The Environmental Science Graduate Program site is attractive, but not student centered. It does not begin with what potential students need to know about the program. Also, the strong emphasis on tracks

“A web site is the most important recruitment tool for any program.”

limits applications. Students who are not interested in environmental health or environmental chemistry are not likely to apply.

Deans and department chairs know little about the program and how it benefits their college or department. This serious disconnect threatens the program’s future. University administrators must know how the program benefits them, or they will direct resources and encourage faculty to only support department and college programs.

Administrative

The program needs an administrative associate and this is critical to the success of a graduate program. The administrative associate is the face of the program to most students – applicants, students and alumni. Such a person is also instrumental in gathering and reporting information. Requiring a faculty member to act as both director of the program and carry out the tasks of an administrative associate is unreasonable and not a good use of the faculty member’s time and talents.

“Faculty involvement needs to be tracked.”

Faculty and students need more opportunities to get involved with program administration. The creation of a standing graduate studies committee would help review applications, with student placement, guide curriculum development and recruitment.

The program shows large numbers of faculty, but how much individual faculty contribute to the program is not clear. Faculty involvement needs to be tracked. Also, a mechanism to drop inactive faculty from the program needs to be exercised.

“A weekly newsletter, short monthly reports and an annual report are needed to keep everyone informed.”

The program has no faculty or student handbook. Faculty and students rely on program documents for advising, planning and monitoring progress toward the degree. Program documents also help protect the students and faculty by establishing minimum standards, standard operating procedures and mechanisms to deal with problems.

Managing a program across many departments and colleges is a special challenge. Regular communication is critical for program identification and cohesion. The program has no regular communication about the program to faculty, deans, department chairs and students. A weekly newsletter, short monthly reports and an annual report are needed to keep everyone informed.

Curriculum

The core course listing lacks interdisciplinary content. As an environmental science program it is missing an ecology requirement. Ecology is the foundation science for environmental science, just as physics is for engineering. The program also has no social science requirement. When alumni were asked what they were missing, they all agreed that their science background was strong, but they lacked the social science experience critical to success in the practice of environmental science.

The two tracks present a narrow focus. Only students interested in environmental health and chemistry are encouraged to apply. Faculty and student interests are broader than just the two tracks.

The narrow curriculum has a limited number of 700 level courses available. Broadening the curriculum should open up access to more graduate level courses.

Structure

Students and faculty across many departments, colleges and two institutions, make program identity and cohesion a challenge. Students and faculty want to get to know each other better, but all are extremely busy. When people work close together in departments a culture, good or bad, develops. In dispersed programs, like Environmental Science, the program leadership needs to organize and orchestrate a cultural agenda.

“...the program leadership needs to organize and orchestrate a cultural agenda.”

Strategies for improvement

Communication

The web site is attractive but needs more content and needs to be organized in a student-centered fashion. Focus groups with students are a great way to start constructing a new site map. Once constructed with prospective and current students in mind, the web site needs to be information dense and current. Two initial suggestions are to:

- Add research interest to your list of faculty. The list in Appendix F of the self-study is a good start, but too long for the website – limit research interests to 3 lines. Dr. Chandra’s description is a good example.
- Feature the activities of students and alumni on the first page of the website.

University administrators must know more about the program and its benefits to the University, college and department. Regular brief updates should be sent to administrators and the faculty. Possible topics are:

- Student numbers and sources of their support
- Measures of student quality (GRE, GPA)
- Student diversity (by gender, MS/PhD, Domestic/International)
- Student graduation and placement
- Credit hours taken by students by department/college
- Faculty involvement (advising/supporting, student grad committee, standing committee, teaching a core course)
- Student research topic and publications

Environmental Science students and faculty need a regular communication from the program. An e-newsletter works well for these dispersed groups. A newsletter could contain:

- Professional development opportunities
- Jobs, workshops, conferences
- New courses of interest
- Environmental events
- Profile students and alumni
- Upcoming seminars of interest

“University administrators must know more about the program and its benefits to the University.”

Administrative

The program MUST have administrative associate. This person, supervised by the director, would do the following:

- Manage the student application process and answer questions of potential applicants
- Help faculty find the students they need for projects
- Track student progress and assist students through challenges in their program
- Track alumni placement and success

- Organize meetings, seminars, and events
- Prepare reports for faculty, deans, department chairs and the Graduate School
- Oversee and update website
- Prepare and distribute regular e-newsletter

Perhaps the Academy of the Environment can assist in meeting this need.

Curriculum

ELIMINATE TRACKS that are limiting applications to the program and flexibility. The current tracks are creating unnecessary tension in the program and with other programs. The tracks of environmental health and environmental chemistry are also narrow, overlapping and limiting the applicant pool. Flexibility is the greatest strength of the program. The tracks limit flexibility.

“Flexibility is the greatest strength of the program. The tracks limit flexibility.”

Instead of tracks, highlight the research of the faculty. This will allow for greater flexibility, as research interests will change as faculty enter and leave the program and with changes in funding opportunities.

Instead of tracks, develop a strong, new interdisciplinary core. The goals are as follows:

- Give all students an interdisciplinary experience across physical, biological and social science.
- Provide a core class that all students take, to get to know their classmates and build unit cohesion.
- Maintain flexibility in course focus to match research opportunities.

The new core should contain the following:

- New required course – Introduction to Environmental Science
- Listing of social science courses to choose from, such as environmental law, policy, regulatory processes, project management, economics, etc.
- Listing of core physical and biological sciences to choose from, such as chemistry, geology, natural resources, ecological processes, engineering, public health, etc.

Recruitment

Low student numbers are a problem for the program. Faculty can place more students than apply. Through a modest recruitment effort, UNR should be able to turn this trend around.

The web site **MUST** be enhanced because it is the major recruitment tool. The web site must be student centered and be easy for prospective students and current students to find what they need to know.

“The best source of graduate students is from nearby undergraduate programs.”

The best source of graduate students is from nearby undergraduate programs. Rather than invest time and effort to recruit individual students, develop linkages with faculty from nearby undergraduate programs. These are the people that encourage students to apply to graduate school.

- Send them a thank you letter for writing letters of recommendations
- Ask them to come to UNR to give seminars and volunteer to reciprocate
- Make sure the web site is easy for these faculty to find and use when advising students.

Recruit locally from people already studying and working in the Reno area. Students from all science departments at UNR are potential graduate students in environmental science. Local DRI staff, government agencies, industries, and consultants may want to pursue advanced degrees. We spoke to

one of your alumni who was a consultant and entered the program to get an MS to expand her business. Some ways to reach out locally are as follows:

- Use current students and alumni to help with recruitment
- Host and participate in recruitment events for local students and professionals

Faculty and student involvement

The program needs to establish a standing committee for steering, admissions, curriculum and examination. The committee should be made up of active faculty, a DRI representative and a student representative. One committee could provide these functions with special attention to reviewing applications, managing core course listings, reviewing faculty membership and involvement, providing input and review of the Introduction to Environmental Science course content and development of a student and faculty handbook.

UNR has a unique resource in the DRI adjacent to the campus. DRI faculty want to be more active in the Environmental Science program. Plan to hold one semester seminar each year at DRI. Also take more advantage of new video link technology.

The Environmental Science Graduate Program has a long list of faculty, but it is not clear all are active. Prepare and communicate expectations for involvement and include the expectations in the faculty handbook. Review faculty involvement annually, report it to the faculty and administrators, and encourage faculty to be involved and stay on list.

Foster the development of a student club. Student clubs, to insure their success, must be developed and driven by the students. The program, however, can support the club in communications, setting up and announcing an organizational meeting, and co-sponsoring club activities.

“Student clubs, to insure their success, must be developed and driven by the students.”

Develop an identity and culture for the program. Logos are important for disperse programs. Promotional items that students wear and use bring program identity (t-shirts, grocery or lunch bags, sun-safe hats, etc.). Regular receptions or events start to build the culture of the program.

Program review process

The self-study materials were well organized and concise. It was easy to find the information we needed to begin evaluating the program.

The 2-day visit was well organized. Ample time was scheduled for the review team to work on the report. It would have been good to schedule some time with the director. We had many questions that only the director could answer.

Response from Director of the Environmental Sciences Graduate Program

prepared by

Dr. Mark Walker
Graduate Program Director
Environmental Sciences Graduate Program
University of Nevada
May 6, 2008

General Comments

Many thanks to the review team for providing insights and commentary about the Environmental Sciences Interdisciplinary Graduate Program at the University of Nevada. The review team highlighted some of the aspects of the program that are very positive, including the flexibility for students in terms of course work and research. The reviewers identified this, and several other aspects of the program, as strengths that we should strive to preserve. The report that students and alumni expressed enthusiasm about their participation as students in the program was very positive. Also, the observation that the University of Nevada has what many institutions are trying to create is extremely encouraging.

Response to “Weaknesses” section

Communication

The reviewers have several observations related to communication. First they indicated that the web site for the program is in poor condition and needs to be revamped. They point out that a web site is an important tool for recruitment and in this context they noted several deficiencies. They suggest that the website is not attractive and does not present information that makes the program easily understood and marketable to perspective students.

“One of the most important next steps includes convening a focus group of students...”

We recognize that the web site is in need of improvement and have begun to redesign the site with an emphasis on improvement of presentation and content. We anticipate that this process will take place over the summer of 2008 and that, by Fall of 2008, we will have a new web site. We currently have two prototypes that a designer from the University of Nevada’s Graduate School developed. One of the most important next steps includes convening a focus group of students (primarily undergraduates) to evaluate the suitability of the web site as a representation of the program. One of the aspects that we intend to focus upon will be the attractiveness of the web site in recruiting potential students.

The reviewers also felt that the emphasis on tracks (the Environmental Processes and Environmental Health tracks) restricted interest on the part of potential applicants. This suggests that the core curriculum for each track should be revised. This point should be addressed in a general discussion by the faculty. Initial discussions should be conducted by a committee charged with evaluating the current curriculum to evaluate the possibilities for revision. Some of the elements of revision that would be important to consider would be de-emphasizing specific disciplines such as chemistry and adding courses that may be of more general interest (e.g. Social Sciences, Environmental Policy).

The reviewers also suggest that deans and department chairs be better informed about how the program is benefiting colleges and departments. The reviewers’ comments suggest that university administrators, including deans and department chairs, are unclear about the benefits of the interdisciplinary programs, including the Environmental Sciences programs. We have had preliminary discussions with the Academy for the Environment about developing a newsletter or some other method

of communicating the level of participation that they now have in this program and, of more importance, the direct benefits that they receive because of the existence of the program and the interdisciplinary nature of the research carried out by participating faculty and students.

Administrative

The review team pointed out that the program needs an administrative assistant and that this would be critical to success of the graduate program. One of the real benefits of carrying out this review was that we were able to clarify the administrative role of the Academy for the Environment, which led to an offer of administrative assistance through the Academy. We have now met twice to discuss support that the Academy can provide under the current administrative arrangement.

“We concur with these recommendations and look forward to convening committees of students and faculty...”

The reviewers point out that the program is administered primarily by one person, the director. They urge that standing committees be convened to help review applications, recommend placement for students, oversee curriculum development and recruitment. We concur with these recommendations and look forward to convening committees of students and faculty who will be involved in managing central elements of the program.

The reviewers suggest that the number of faculty listed as being part of the program may be misleading based upon the actual contributions of faculty to the program. They suggest that faculty involvement be tracked. They also suggest that the program make an effort to remove faculty from the program roster if they are judged to be inactive. As part of the program review we made an effort to provide a list of faculty who are currently participating in the program, primarily as mentors of graduate students. While we agree that not all levels of participation are equal, we anticipate that it will be useful to define baseline criteria that faculty must meet to remain on publicly available lists, such as web sites, that list faculty who are part of the program. This is a matter that must be addressed by a committee convened as part of the Environmental Sciences graduate program.

The reviewers suggest that we have a faculty and student handbook. We feel that such a handbook could be compiled and presented as part of the program web site.

Curriculum

The reviewers felt that the core course listing lacked interdisciplinary content; specifically that it was missing an ecology requirement. They felt that ecology is a foundation science for Environmental Science and that the current core overlooks this key element. They also report that alumni felt that social science preparation (especially applied social science and policy) was lacking. As noted above this is a matter that should be addressed by a faculty committee. It is worthwhile to revisit the curriculum to determine if it meets our expectations, especially in light of the expectations that the students have for the types of course work required of them in this program.

“It is worthwhile to revisit the curriculum to determine if it meets our expectations...”

Program Culture

The reviewers suggested that the program needs more organized activities to develop a program culture.

Strategies for improvement

Communication

The reviewers suggest that we add research interests of participating faculty to the web site. This is very important information but may overlook some of the practicalities of web site maintenance. First, a previous version of the web site, including faculty profiles, was maintained exclusively by an

administrative assistant in the Environmental Sciences program. While this arrangement was useful it was not practical for the program to maintain the profiles of participating faculty. We feel faculty should have and maintain their own web sites to ensure that information available to students is current and correct. This would include statements of research interests. We look forward to providing an attractive website that helps to showcase the types of interdisciplinary research that faculty undertake. However logistically it may be a better strategy to rely on individual faculty to maintain their web sites to present information to perspective students about the types of research that they conduct. In fact, it may be part of the criteria for participation that faculty maintain their web sites and indicate an affiliation with the Environmental Sciences program on their sites.

“...faculty should have and maintain their own web sites to ensure that information available to students is current and correct.”

We agree that colleges and departments do not recognize the value they receive from the University investment in this and other interdisciplinary programs on campus. We thank the reviewers for their suggestions about the types of information that would be useful to provide to various levels of administration, including the university itself. Again, our affiliation with the Academy for the Environment will be help in developing a regular form of communication to ensure that the benefits of the program are recognized throughout the University.

We also agreed that there is a need for regular communication from the program including something like a newsletter. This is closely linked with the recommendation that the program have been administrative assistant.

Administrative Recommendations

We agree that the program should have an administrative assistant. The reviewers close this section by recommending that the Academy for the Environment assist in meeting this need. In fact, immediately following the review, the Director of the Academy for the Environment convened a meeting with an administrative assistant who is currently working at the Academy. The purpose of the meeting was to identify tasks that could be undertaken by the administrative assistant to help with the day to day management of the program. This is a very positive and welcomed development and, as the arrangement matures, will likely provide the needed assistance for program management.

Curriculum

The reviewers recommend eliminating the tracks because they feel that these are limiting applications to the program and limiting program flexibility. They also feel that these tracks are creating unnecessary tension with other programs (e.g. the School of Public Health). Recently this issue has become more acutely important because of a proposal developed by the School of Public Health to establish an Environmental and Occupational Health doctoral program within the School of Public Health. Their proposal, developed as part of a statewide initiative to expand public health education in Nevada, has created some controversy because neither the potential for overlap nor the potential for mutual benefits has been well defined.

However, before the Environmental Sciences Graduate Program abolishes the idea of tracks it will be important for faculty who are involved in tracks to reach a consensus about what tracks are important, what they accomplish, and why they should be preserved. The reviewers note that the track concept limits flexibility. Although this may be the case it is not completely clear that the tracks themselves are limiting flexibility; it is more likely that the core courses associated with the tracks are limiting flexibility and revisiting the core courses seems like an appropriate first step in addressing this recommendation. The reviewers point out that a substitute for tracks would be a strong new interdisciplinary core curriculum. The reviewers provide suggestions for what the core should contain,

“...it is more likely that the core courses associated with the tracks are limiting flexibility...”

including an introductory course in social or physical or biological sciences. This is a very useful suggestion and we anticipate discussing this issue in the coming months.

Recruitment

The reviewers point out that student numbers and declining enrollments are a problem with this program. This is reflected in the fact that faculty could accommodate more students than the program has available to place. The reviewers offer several good suggestions about recruitment, including enhancing the website, establishing and maintaining contact with local institutions that could contribute students from undergraduate programs, and initiating and maintaining contact with professional organizations including local governmental organizations. We feel that these suggestions are constructive and are components of a long-term strategy to increase enrollment in the program.

Program culture

The reviewers indicated a need for a program culture and identity and offered a range of approaches to establishing the culture and identity. This included establishing a student club, a program logo and distributing promotional items that offer program contact information and display the program logo. These are all very good ideas and we will pursue as many of them as the program budget permits. This could include receptions built around speakers, especially well known speakers who attract students and faculty in the program and also community members who are interested in the subject area. Hosting funds would help accomplish this.

“...This could include receptions built around speakers, especially well known speakers who attract students and faculty...”

Response from the Executive Director, Academy for the Environment to the External Review of the Environmental Sciences Interdisciplinary Graduate Program

prepared by

Dr. Michael W. Collopy
Executive Director
Academy for the Environment
University of Nevada
May 9, 2008

General Comments about Review Process

I have reviewed the report prepared by the two external reviewers, Dr. Karen Mancl (Ohio State University) and Dr. Elizabeth Wattenberg (University of Minnesota), and believe they did an excellent job in reviewing the interdisciplinary graduate program in Environmental Science. During their two-day visit, they quickly identified the key issues with which the ES faculty are grappling, and offered some insightful suggestions for improving the program. Their ability to efficiently assess the status of this program and understand the issues facing its future was greatly aided by an excellent Self Study document prepared largely by the program director, Dr. Mark Walker, and he is to be congratulated.

Assessment of Program Strengths

One of the key program strengths identified by the review committee was the flexibility of the curriculum. They also commented on the high degree of student satisfaction with the program, as well as the students' success in finding employment in their field upon graduation. The review committee acknowledged that there has been a long legacy of strong leadership in the director position. In addition, the success with which faculty obtain research grants that support graduate students, was also identified as a strength of the program.

“One of the key program strengths identified by the review committee was the flexibility of the curriculum.”

I believe that the interdisciplinary focus of this and other environmental degree programs at UNR is a tremendous asset to graduate students seeking a relevant education in the 21st century. As the review committee pointed out:

“The interdisciplinary climate throughout the nation and among sponsors and employers is strong. Professionals with skill sets that cut across disciplines are in demand. Real issues are not discipline centered, so students who are comfortable working with people from a range of backgrounds can be extremely effective at their work. UNR already has what many institutions are trying to create.”

Assessment of Program Weaknesses

The committee identified a number of weaknesses, but indicated that these could be easily addressed and that this “[v]ery positive program has more strengths than weaknesses.” I agree with this assessment. In my view, some of the more significant of the weaknesses the committee listed included: inadequate communication with both potential graduate students (i.e., the website is “broken”) and deans/department chairs (i.e., who “know little about the program and how it benefits their college or department”); the lack of administrative support for the graduate program and its Director; a restricted and narrowly defined curriculum, and low student recruitment. However, these are issues that can be addressed fairly easily. Some strategies for doing so are mentioned in the recommendations section below.

Recommendations for the Future

The Committee weighed in with a number of recommendations for addressing the perceived weaknesses in the Environmental Science graduate program. Dr. Mark Walker has since developed a response to their report. My comments below are in reaction to both the committee report and the program director's response.

Communication

The program's website needs to be updated and made more student-friendly, particularly if it is going to be successful in promoting the program and enhancing student recruitment. The Academy for the Environment (UNAE) has offered to provide technical assistance to enhance and maintain the ES graduate program website. The UNAE has recently upgraded its own site, with the assistance of UNR's Digital Initiatives department, and is willing to incorporate and support the ES site along with its own. Website enhancements should be a great help in promoting faculty in the program, their respective research programs, and a tool for attracting and recruiting future students to the program.

"UNAE has offered to provide technical assistance to enhance and maintain the ES graduate program website."

Increasing the visibility and appreciation of the Environmental Science program with deans and department chairs is an ongoing challenge that faces all of interdisciplinary graduate programs at UNR. The strategies the committee suggested for doing this are helpful and the Academy is committed to helping the ES program disseminate any information they believe would assist them in achieving this goal (e.g., direct correspondence, briefings, newsletters, etc.).

Administrative Support

All are in agreement that this program needs an administrative assistant if they are to make progress in undertaking the actions proposed by the committee. The UNAE has recently employed a part-time Administrative Assistant II to assist with the Academy's academic and outreach programs; however, we believe we have the capacity to commit a portion of this person's time to provide administrative support to the Director. The specific administrative duties and time commitment that the AAIL will provide to the ES program are still being determined, but will be worked out in the upcoming weeks.

Curriculum

In light of declining enrollments and the emergence of a proposal in the School of Public Health to create a Ph.D. program in Environmental and Occupational Health, the committee suggested that the program consider broadening the core courses students can select from and eliminating the two tracks in the program (i.e., Environmental Processes and Public Health). From my perspective, there appear to be a number of advantages to taking these actions (e.g., broadening the focus of the program beyond the two current tracks, establishing a potentially larger student recruitment pool, attracting a greater number of environmentally-oriented faculty), while protecting the highly valued flexibility of the program. Any action will obviously need the support of the faculty; however, I believe these recommendations should receive serious consideration.

"These recommendations (to broaden the core courses that students can select from) should receive serious consideration."

Recruitment

The viability of this program is, in part, dependent on a stable-to-increasing population of graduate students. Given the current funding algorithm used to support interdisciplinary graduate programs, declining enrollments equate to declining program budgets. Therefore, it is important that the program seriously consider how best to attract, retain, and graduate a greater number of students from their

program. In a modest effort to assist in this effort, the UNAE has offered a competitive, 1-year research assistantship to help an ES faculty to recruit a new student to the program (see attached flyer).

Faculty and Student Involvement

A number of suggestions were provided by the review committee that would encourage greater engagement by faculty and students associated with the ES program. The faculty should consider these and other suggestions they have received, and set some priorities regarding the most important actions that should be taken. With the new administrative support the UNAE is providing, we hope there will be increased capacity to achieve many of these actions; however, careful consideration needs to be given to how the ES programs limited resources can be best deployed to support its students and faculty.

“With the new administrative support the UNAE is providing, we hope there will be increased capacity...”

Summary

I found the Self Study document well prepared and the site visit by the review team was organized and efficient. The review team had expertise in both environmental science and public health and, I thought, provided a balanced approach to the issues being considered. The report they provided to the ES Program and the Director’s response was thoughtful, reasoned, and called for significant faculty engagement prior to making any major decisions. The administrative relationship between the ES Program and the Academy for the Environment had previously been vaguely defined; however, this review and its associated recommendations have provided some focus to the needs of the ES Program and enabled the UNAE to determine how best it can provide support to this important interdisciplinary graduate program, as it moves forward to implement the recommended actions.