Environmental Sustainability Instruction at East Carolina University

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ABSTRACT

A survey was conducted. Its purpose was to catalogue environmental sustainability instruction at ECU in response to and in support of the East Carolina University's UNC Tomorrow Response Phase I Report, Phase II Guidelines outlined in UNC's Tomorrow Response Phase Planning Process, and the University of North Carolina Tomorrow Commission's Final Report dated December 2007. This report summarizes the responses to the survey.

INTRODUCTION

A survey was conducted. Its purpose was to catalogue environmental sustainability instruction at ECU in response to and in support of East Carolina University's UNC Tomorrow Response Phase I Report, Phase II Guidelines outlined in UNC's Tomorrow Response Phase Planning Process, and the University of North Carolina Tomorrow Commission's Final Report dated December 2007. ECU's strategic plan, *ECU Tomorrow: A Vision for Leadership and Service*, aligns itself with the UNC Tomorrow Commission's findings and recommendations. In the area of environmental sustainability, the Phase I Report, dated May 1, 2008, states that East Carolina University will:

- Expand and apply its expertise, research and outreach functions to address regional and wider-scale challenges and to support public and private sector decision-makers in such areas as the economy, environment, and energy and water, among others.

- Increase faculty and student knowledge, motivation and capacity for scholarly instruction and learning, research and development, and engagement and outreach to meet the needs of those we serve as we increase the University's positive impact on society. (Ballard, 2008)

In the same report, East Carolina University plans to be the Leadership University. One of the visionary ways in which East Carolina University plans to accomplish this is by creating an Office of Sustainability.

> ECU will lead in the area of environmental sustainability and demonstrate a clear sensitivity to the sustainability of its own operations and to the advocacy of sustainability in its instructional, research, and outreach programs. ECU will adopt environmental sustainability as a core institutional value to be evidenced in its own stewardship and leadership in addressing issues of sustainability in North Carolina. ECU will draw upon its faculty expertise and call upon the management of its infrastructure to lead this effort. To accomplish this goal, the following major initiatives will be implemented:
>
> a. ECU will establish an **Office of Sustainability** at the senior management level. This office will coordinate with the ECU Committee on the Environment, maintain essential environmental inventories, and make policy recommendations. It will be led by a senior person with the title "**Chief Sustainability Officer**."
>
> b. During 2008, senior management at ECU will evaluate how to best create and staff this office to maximum effect. Budgetary needs and funding sources will flow from these decisions.
>
> c. **ECU Sustainability Internship Program** - This program will provide a means for cooperating faculty and students to participate in a wide range of community and regional efforts to improve the sustainability of resource use in eastern North Carolina. The effort will coordinate with the Office of Economic Development in linking to external engagement opportunities and the Office of the Chief Sustainability Officer to provide service-learning opportunities on campus. This effort will provide real-life "laboratory" opportunities for students to gain hands-on experience and leadership in environmental issues. (Ballard, 2008)

Another way East Carolina University plans to be the Leadership University is by deploying a Center for Sustainable Design.

> This Center will bring together faculty and students (undergraduate and graduate) to conduct basic and translational research and development in conjunction with the outreach efforts of the University on issues of the natural and built environments at a variety of scales and in a variety of landscape positions. The unique purpose of this center will be to coordinate the integration and provision of sustainable design expertise via the format of an engaged learning laboratory. This effort will draw on ECU's traditional strengths in coastal science and policy, rural communities, sustainable tourism, agromedicine, natural hazards research, STEM-related environmental education, geospatial information sciences, P-12 education and outreach, and the development of satellite communities. The Center will utilize existing design infrastructure across campus and utilize the planned **Innovation Design Lab** (See above ECU's Vitality and Economic Prosperity in the East). ECU will recruit inter-disciplinary faculty and support aggressive recruitment of graduate students, specifically those with an interest in engaged scholarship. (Ballard, 2008)

Environmental Sustainability Instruction Survey

An eleven item environmental sustainability instruction survey was conducted spring semester 2011 as part of the UNC Tomorrow Response Phase Planning Process and the 21st Century Skills component to review and affirm the knowledge and skill of environmental literacy, which represent the desired characteristics of UNC institution graduates; review their general education requirements and other curricula where appropriate, along with other activities and initiatives; and develop plans for ensuring that students' knowledge and skill will be enhanced (UNC Tomorrow, 2008). The campuses that make up the University of North Carolina were also asked to review existing campus based initiates, research and scholarship activities and public service/engagement programs and initiatives to identify how they may improve the environmental sustainability of the campus, leverage and focus the expertise on campus to address critical energy and environmental challenges, and increase awareness of environmental and sustainability issues. (UNC Tomorrow, 2008).

Instrument

The instrument was comprised of eleven items. The first five odd numbered items—1, 3, 5, 7, and 9—were yes/no items. The five even numbered items asked the respondents to provide additional information if the respondent responded with a "yes". Item eleven provided the respondent with opportunity to any additional relevant comments. There were no requirements to respond to an item before proceeding.

The instrument (https://ecu.qualtrics.com/SE/?SID=SV_6WQ568pzcA3NRT6) was deployed Wed 3/16/2011 1:47 PM by means of a FACULTY-L@LISTSERV.ECU.EDU message.

Results

Figure 1 summarizes the proportion of the survey completed by the respondents. One-hundred thirty-two potential respondents accessed the survey site. About a third of the respondents accessed the survey site but did not proceed too much further. Most of the remaining respondents completed approximately 40% of the survey.

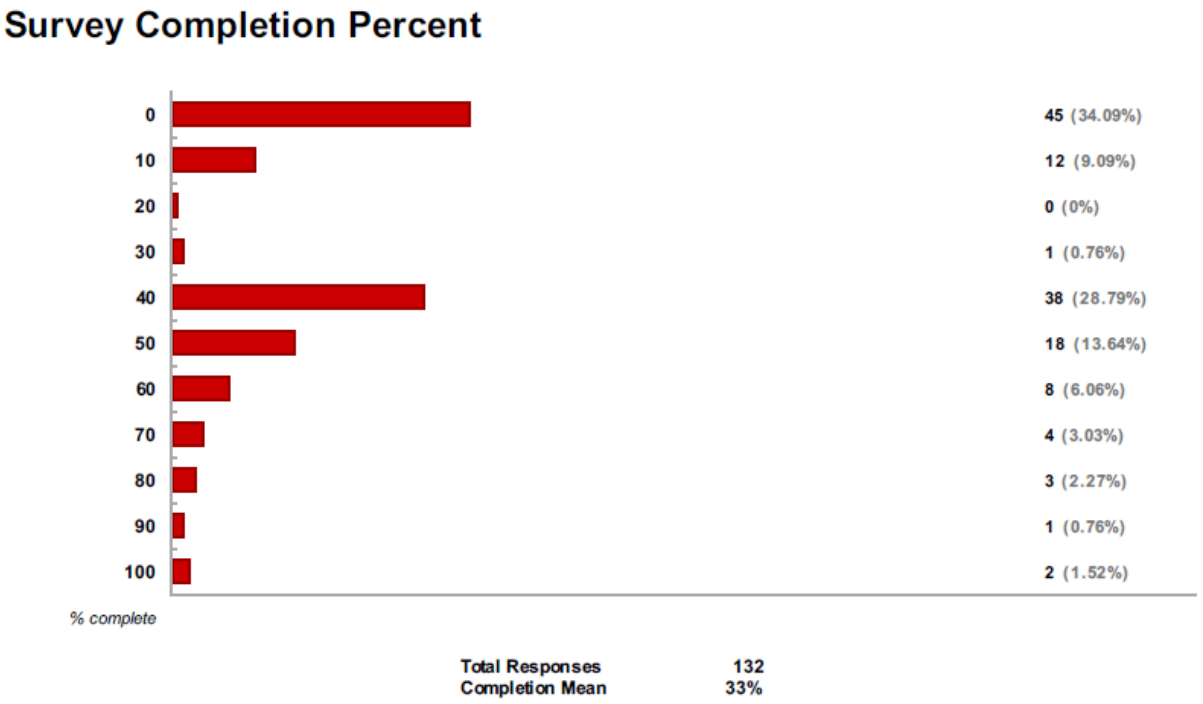

Figure 1. Survey completion rates.

Figure 2 summarizes the response rates for the eleven survey items. At least half of the respondents responded to the first five odd numbered items: the yes/no items. A much smaller proportion responded to the follow-on items.

Figure 3 summarizes the responses to the question "Do you deliver environmental sustainability instruction in the form of unit or units of instruction?" Twenty-five percent responded in the affirmative. When answered in the affirmative, the respondents were asked to elaborate. Figure 4 summarizes the responses: courses in which a unit or units of environmental sustainability instruction are delivered.

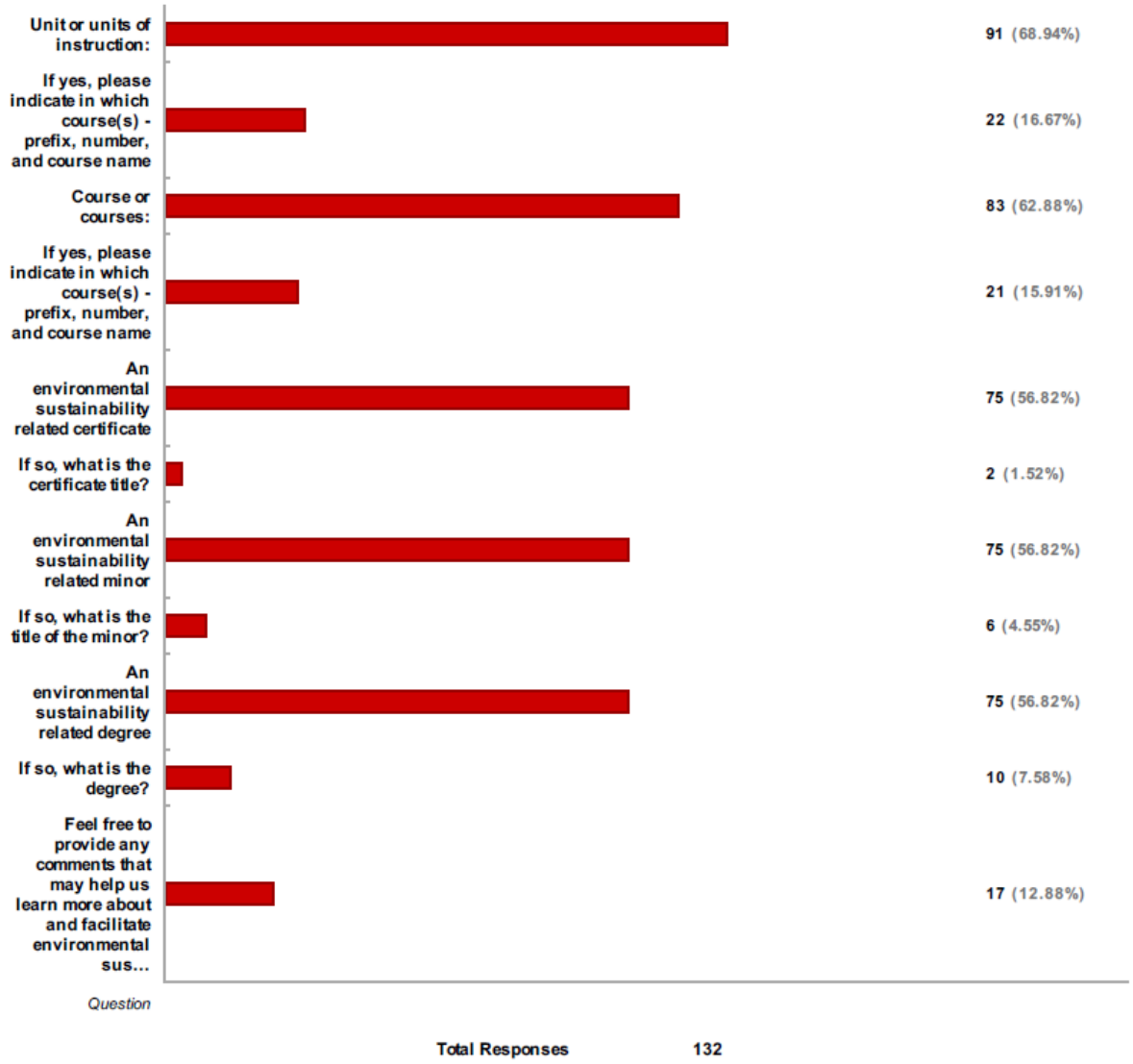

Figure 2. Response rate by question.

#	Answer		Response	%
1	Yes		23	25%
2	No		68	75%
	Total		91	100%

Figure 3. Responses to item one.

Text Response
GEOL 1500, GEOL 1800, GEOL 4010
RELI 2693 Indigenous Religions. RELI 3690: Women and Religion
BIOL1060, BIOL1061
DESN 3030/1 Architectural Drafting, DESN 3036/7 Architectural Design and Drafting, DESN 3038/9 Sustainable Design.
BIOL 1060 Environmental Biology
SCIE 6200; SCIE 3604
GEOG 1000 Introduction to Geography.
Art 3210
BIOL 2250 General Ecology, BIOL 3240/3241 Field Zoology
EHST 2010, EHST 6010, EHST 6800, EHST 4200
GEOG 1000 People, Places Environments; GEOG 6350 Seminar in Rural Development
MIS 2223 - Introduction to Computers
BIOL 4200 Population and Community Ecology
Units in ENGL 3020 (History of American Lit to 1900), ENGL 3300 (Lit by Women), GRBK 2600 (19/20th ce), WOST 4000 (Feminist Theory) & GRAD: ENGL 5060 (Intro to Criticism)
CHEM 2650
EHST 3060 Environmental Issues in Construction; EHST 3900 Occupational Health; EHST 3700/01 Industrial Hygiene
GEOG 3230, Global Climates
HIST 6805 History and Theory of Nautical Archaeology
CMGT 2664 Interior and Exterior Construction Finishes
GEOG 1000, People, Places and Environments
BIOL 1060 online Environmental Biology, BIOL 1061 online Environmental Biology Lab
Biol 1050 General Biology

Figure 4. Courses in which environmental sustainability instruction is delivered.

The responses to the question "Do you deliver environmental sustainability instruction in the form of course or courses?" are summarized in Figure 5. Twenty-eight percent answered in the affirmative.

#	Answer		Response	%
1	Yes		23	28%
2	No		60	72%
	Total		83	100%

Figure 5. “Do you deliver environmental sustainability instruction in the form of course or courses?"

The courses in which environmental sustainability instruction is the focus of the course appears in Figure 6.

Text Response
PLAN 1900 Planning for the Human Environment; PLAN 5065 Land Use Planning
GERM 2420, GERM 4700
RELI 2693 Indigenous Religions. RELI 3690: Women and Religion
BIOL1060, BIOL1061
HIST 3993 Approaches to Historical Objects HIST 3980 Shipwreck Archaeology HIST 5985 Historic Preservation Planning
DESN 3038/9 Sustainable Design.
MATH 2121, MATH 2122, MATH3100, MATH 4100
ENGL 7765 Sp. Topics in Technical and Professional Communication: Risk Communication
SCIE 6200
GEOG 5393 Seminar in Human Geography; CRM 6300 Seminar.
EHST 2010, EHST 6010, EHST6800, EHST4200, EHST 6700
GEOG 4325 Resources, Population & Development; GEOG 6325 Adv Population & Development
BIOL 2250 Ecology
ENGL 4370 (Literature and Environment); ENGL 3660 (Representing Environmental Crisis); ENGL 3670 (Food and Narrative) & GRAD: ENGL 6260 (as American Lit and Environment), ENGL 7265 (as Ecocriticism and Env. Lit)
EHST 5800 - Solid and Hazardooous Waste; EHST 3350 - Safe Waters; EHST 3370 - Wastewater
GEOL 1500, Dynamic Earth
At least five Maritime Studies courses have elements of environmental sustainability
BIOL 2250--Ecology; BIOL 5870--Marine Community Ecology
BIOL 1060 online Environmental Biology, BIOL 1061 online Environmental Biology Lab
OMGT 3123 Operations and Supply Chain Management
IDSN 2800 Interior Design I: Residential Design 1, IDSN 2850 Interior Design II: Commercial Design 1; IDSN 3550 Materials and Specifications for ID, IDSN 4700 Senior Studio: Problems in ID

Figure 6. Environmental sustainability courses.

Figure 7 summarizes the proportion of respondents who responded in the affirmative to the question of "Do you deliver environmental sustainability in the form of an environmental sustainability related certificate?"

#	Answer		Response	%
1	Yes		2	3%
2	No		73	97%
	Total		75	100%

Figure 7. "Do you deliver environmental sustainability instruction in the form of an environmental sustainability related certificate?"

When answered in the affirmative to the preceding question, the respondents were asked to identify the certificates—see Figure 8.

Text Response
Rural Development
Not sure .... I have not looked into this yet.

Figure 8. Environmental sustainability related certificates.

Figure 9 summarizes the responses to "Do you deliver environmental sustainability instruction in the form of an environmental sustainability related minor?" Seven respondents answered in the affirmative.

#	Answer		Response	%
1	Yes.		7	9%
2	No		68	91%
	Total		75	100%

Figure 9. Environmental sustainability related minor.

When answered in the affirmative to the preceding question, the respondents were asked to identify those minors. Figure 10 summarizes the text responses.

Text Response
possibly- I don't know all of the course requirements for all of the minors on campus
Geography
Environmental Health
Geography
Again, I have not yet cross-listed the undergraduate courses, but ENGL 3660, 3670, and 4370 should participate in such a minor.
Environmental Health Sciences and Safety

Figure 10 Environmental sustainability related minors.

Fifteen percent of the respondents indicated “Yes” to the question of "Do you deliver environmental sustainability instruction in the form of an environmental sustainability related degree?”—see Figure 11.

#	Answer		Response	%
1	Yes		11	15%
2	No		64	85%
	Total		75	100%

Figure 11. Environmental sustainability related degree.

The list of environmental sustainability degrees appears in Figure 12.

Text Response
possibly- I don't know all of the course requirements for all of the degrees on campus
Coastal Resources Management PhD
Geography, Applied Geography
BS in Environmental Health, MSEH, Master of Science in Environmental Health
BA Geography; BS Applied Geography
Biology
Again, see above.
Environmental Health Sciences and Safety
Possibly CRM PhD
Applied Geography

Figure 12. Environmental sustainability degrees.

The comments made by the respondents with respect to learning more about and facilitating environmental sustainability instruction at ECU appear in Figure 13. Most of the comments provided positive feedback. A few suggest that some of the respondents were not aware that as a part of the University of North Carolina system, East Carolina University is to assume a leadership role in addressing the state's energy and environmental challenges or that ECU's strategic vision includes a commitment to leading, "in the area of environmental sustainability and demonstrate a clear sensitivity to the sustainability of its own operations and to the advocacy of sustainability in its instructional, research, and outreach programs. ECU will adopt environmental sustainability as a core institutional value to be evidenced in its own stewardship and leadership in addressing issues of sustainability in North Carolina." (Ballard, 2008) At least two respondents appeared hostile to the inclusion of environmental sustainability instruction.

Text Response
I'm glad that you're asking. This is an important topic.
We throw away masses of paper at the clinics in Brody. Much is not patient-confidential. Also, we have soda pop cans, etc. Perhaps one course could do a "service learning project" to get recycling done and keep any money made for your program?
Possibly more can be done with General Education courses
The PhD program in Coastal Resources Management includes several possible electives offered by the English Dept. including courses in public policy, technical, and scientific writing. These courses help students learn how to develop complex information about various issues, including environmental issues, for audiences.
Make it easier to get new courses approved
This kind of ideologically motivated top down pressure to impose pet politicized topics on the course of instruction is academically and morally unacceptable!
Environmental Sustainability Instruction should permeate ALL of our classrooms, but also office spaces and dorms. In our main office in my Department, there is STILL no official recycling bin, and no efforts to maintain one. This is a problem of lack of accountability from unit administrators and staff on basic environmental practices.
I discuss sustainability in my courses, but not as a distinct unit or topic of study. It is covered as a conservation concept where applicable.
It shouldn't be our job to facilitate environmental sustainability or incorporate that into our instruction. We have enough difficulty getting our students to learn the basics of our disciplines to any level of sufficient competency.
The job of university facultyy is to teach students hows to think for themselves, not to feed them political propaganda for whatever is the latest perceived global problem. If it is the problem faculty take it to be, teaching them how to think will enable them to reach this conclusion without our offering biased instruction. Offering politicall biased instruction undermines our credibility as university faculty.
educate students about local options for recycling computer equi[pment, electronics, etc.
Please contact me (federh@ecu.edu) about any sustainability/env. studies cross-listing.
What exactly is environmental sustainable instruction? I couldn't find a definition in the literature you provided. If it is what I think it is, what does it have to do with what I teach? I am not in that field, so it is irrelevant to what I teach. Furthermore, that concept represents a philosophy I and many others do not share. It inclusion into our curriculum implies that the debate is over, the facts are, in consensus is achieved. It is not and I regard its inclusion as a breach of ethics.
EHST 2110 -Introduction to Environmental Health Sciences: ECO-Pirates student environmental Club
The Program in Maritime Studies deals with non-renewable, archaeological, resources. There are numerous links to other areas that could impact sustainability, including heritage tourism.
I have attempted to create a certificate in Environmental Sustainability for those in non-biology majors, such as Business, but have received no support for such an endeavor. I could offer this online as well!
While it is not a part of my courses, environmental sustainability is a part of my lifestyle. My personal examples in and out of the classroom include recycling, biking to work, eating local foods, etc. Can't hurt, could help!

Figure 13. Additional comments.

[end of report]