Mission / Purpose

The principal objective of the graduate program of the Department of Earth and Environmental Sciences (EES) at the University of New Orleans is to provide quality education opportunities at the graduate level for students pursuing M.S. and Ph.D. degrees in earth and environmental sciences. We actively seek to recruit local, national, and international students in quest of careers in earth and environmental sciences and we endeavor to provide these students with the fundamental technical knowledge and skills required for successful professional and academic careers in the earth and environmental sciences. The Department is committed to maintaining and developing expertise and technical capabilities in EES research areas, collaborations with local businesses, government, private agencies and non-governmental organizations concerned with natural resources, environment and economic development of the region and nation. Partnerships with local, national, and international businesses, schools, universities, and government agencies are a key focus of our efforts to provide quality education and employment opportunities for our graduate students. At the graduate level we strive to offer a diverse suite of concentration-specific 4000G level courses that are also part of the undergraduate curriculum. Faculty offer 6000-level graduate courses and seminars in their fields of expertise, ensuring that M.S. and Ph.D. graduate students have the complete range of credits required for the graduate degree and appropriate to their selected fields of EES research. Moreover, faculty routinely offer special topics courses both at the 4000G and 6000 level providing for a deeper understanding of specific concepts. The Department serves its mission through development of expertise and technical assistance in basic geosciences research, environmental concerns, coastal restoration, and natural resources; collaborations with local businesses, including the oil and gas industry, and with government and private agencies concerned with the environment and the economic development of the region; promotion of science education at the K-12 level, by the recruitment of minority-student majors, frequent presentations by faculty to local high-schools, and through partnerships with minority-serving schools and universities. Partnerships with local, national, and international businesses, schools, universities, and government agencies are a key focus of our efforts to provide quality education and employment opportunities for our students. EES is committed to expanding partnerships, supporting SMET (Science, Mathematics, and Engineering Technology) for the diverse population of our region, and developing a sense of community within the department that creates loyalty to the Department and University through future years.

Goals

G 1: Intellectual contributions
All graduate students will conduct research and a majority will publish their results in peer-reviewed scientific venues either before or after graduating.

G 2: Community outreach
Graduate students will be encouraged to engage in partnerships with institutions, businesses and the community, both locally and nationally, to promote earth and environmental sciences.

G 3: Funding for research
Qualified graduate students will work with their advisors to strive to secure funding for research through private, state, and federal resources.

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Advanced understanding of concepts
EES Graduate students will acquire an advanced understanding of concepts in areas related to their thesis research and area of specialty.

Related Measures

M 1: Research project
All graduate students will complete a research project, requiring the collection and interpretation of data. This will result in the construction of a thesis, which will be orally defended in front of the thesis committee and public.

Source of Evidence: Academic direct measure of learning - other

Target:
A majority vote of the thesis committee, approved by the graduate school, will find the work scientifically sound, noteworthy, and presented well in oral and written format.

Finding (2013-14) - Target: Met
Three out of four M.S. graduate students and three Ph.D Graduate students who completed their research project and defended their thesis/dissertation. 75% were approved by their committees and the graduate school. Spring 2014 All M.Sc. graduate students in spring 2014 completed their research project and defended their thesis, all were approved by their committees and the graduate school.

Related Action Plans (by Established cycle, then alpha):

Successful Thesis Defenses
Of those M.Sc. students attempting to defend in the reporting period, at least 75% will do so successfully, A majority vote of the thesis committee, approved by the graduate school, will find the work scientifically sound, noteworthy, and presented well in oral and written format.

Established in Cycle: 2013-14
Implementation Status: Planned
M 2: Abstract
Students will have their peer-reviewed abstract accepted for presentation, either orally or as a poster, at a professional scientific meeting or society.

Source of Evidence: Academic direct measure of learning - other

Target:
For this measure, 90% of graduate students will submit a minimum of one abstract to a peer-reviewed professional meeting or society.

Finding (2013-14) - Target: Partially Met
80% of the graduate students had their abstract accepted for presentation. Spring 2014 No data available at the time of the report.

Related Action Plans (by Established cycle, then alpha):

Abstract Submission
Because we did not meet our previous goal, we will require that 80% of all M.Sc. students will have their peer-reviewed abstract accepted for presentation, either orally or as a poster, at a professional scientific meeting or society.

Established in Cycle: 2013-14
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Abstract | Outcome/Objective: Advanced understanding of concepts
Implementation Description: Interim Chair will collect data from faculty and Graduate Coordinator.
Responsible Person/Group: Interim Chair, Graduate Coordinator, and EES Faculty.

SLO 2: Presentation
EES Graduate students will be able to construct and effectively competently present Earth and Environmental Science information and concepts information and concepts visually and verbally through oral PowerPoint presentations.

Related Measures

M 3: Presentations
Students in 6000-level graduate courses will be required to submit a minimum of two oral PowerPoint presentations regarding a topic of relevance to the course.

Source of Evidence: Presentation, either individual or group

Target:
80% of the students will achieve a B or better on their PowerPoint presentations using a grading rubric developed by faculty consensus.

Finding (2013-14) - Target: Met
100% of students achieved a B or better on their PowerPoint presentations.

Finding (2013-14) - Target: Partially Met
100% of students achieved a B or better on their PowerPoint presentations. Spring 2014 No data available at the time of the report.

Related Action Plans (by Established cycle, then alpha):

M.Sc. Oral Presentations
Because we exceeded our previous goal, we expect 85% of the students will achieve a B or better on their PowerPoint presentations using a grading rubric developed by faculty consensus.

Established in Cycle: 2013-14
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Presentations | Outcome/Objective: Presentation
Implementation Description: Grades for PowerPoint presentations will be provided to the Interim Chair from EES Faculty.
Responsible Person/Group: Interim Chair and EES Faculty.

M 4: Final grade percentage derived from presentation
Students in 4000(G)-level courses will have a minimum of 20% of the final grade derived from PowerPoint presentations.

Source of Evidence: Academic direct measure of learning - other

Target:
80% of the students will achieve a B or better on their PowerPoint presentations.

Finding (2013-14) - Target: Partially Met
100% of students received a B or better on their PowerPoint presentations. Spring 2014 No data available at the time of the report.

Related Action Plans (by Established cycle, then alpha):

Graduate Student presentations in 5000-level courses
Students in 5000-level courses will have a minimum of 10% (changed from 20% in last Action Plan) of the final grade derived from PowerPoint presentations. In 2013 we expected 80% of the students to achieve a B or better on their PowerPoint presentations. The actual result was 100%. Based on this
result, we will now expect 90% of the students to achieve a B or better on their PowerPoint presentations in 2014.

Established in Cycle: 2013-14
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Final grade percentage derived from presentation | Outcome/Objective: Presentation

Implementation Description: Faculty teaching 5000-level course will provide the Interim Chair will all graduate student grades for PowerPoint presentations.

Responsible Person/Group: Instructors teaching graduate level courses and Interim Chair.

SLO 3: Technical writing
EES Graduate students will be able to explain in technical written format an advanced understanding of concepts in areas related to their thesis research and area of specialty.

Related Measures

M 5: Written assignment
All graduate students will complete an oral and written assignment in the required Graduate Seminar course.

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:
80% of the students will be rated satisfactory on their oral and written presentations.

Finding (2013-14) - Target: Partially Met
100% of students achieved satisfactory on their oral and written assignments. Spring 2014 No data available at the time of the report.

Related Action Plans (by Established cycle, then alpha):

Graduate Student written assignment
In the previous Action Plan, an oral presentation was included with the written assignment. This has been removed as a separate objective. Because EES exceeded our goals in 2013 with 80% of the graduate students achieving a B or better on their written assignment, we will increase our goal for 2014 to 85% achieving a B or better.

Established in Cycle: 2013-14
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Written assignment | Outcome/Objective: Technical writing

Implementation Description: Instructor of Graduate Seminar will provide the Interim Chair will all course grades.

Responsible Person/Group: Instructor of Graduate Seminar and Interim Chair.

SLO 4: Student satisfaction
The department of EES will maintain high graduate student satisfaction with the program.

Related Measures

M 7: Course evaluations
Students in 4000G and 6000 graduate level classes will report a satisfaction rating of 2.8 out of 5 for overall quality.

Source of Evidence: Student satisfaction survey at end of the program

Target:
All concentration level and elective courses required of the degree will achieve at least 2.8 out of 5.0 for overall quality of course.

Finding (2013-14) - Target: Partially Met
Overall quality of the course satisfaction: Fall 2012 4.87%, Spring 2013 4.74% Spring 2014 Evaluations were not completed by UNO and sent to EES by the time of report.

Related Action Plans (by Established cycle, then alpha):

Graduate Course Evaluations
Because we met our goal for the last reporting period, we will increase our goal for 2014. All concentration level and graduate level courses required of the degree will achieve at least 3.0 out of 5.0 for overall quality of course.

Established in Cycle: 2013-14
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):
Measure: Course evaluations | Outcome/Objective: Student satisfaction

Implementation Description: Course evaluation scores will be assessed by EES Staff to determine if goal is met. This information will be given to the Interim Chair.

Responsible Person/Group: EES Staff and Interim Chair.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Abstract Submission
Because we did not meet our previous goal, we will require that 80% of all M.Sc. students will have their peer-reviewed abstract accepted for presentation, either orally or as a poster, at a professional scientific meeting or society.

Established in Cycle: 2013-14
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Abstract | Outcome/Objective: Advanced understanding of concepts  

Implementation Description: Interim Chair will collect data from faculty and Graduate Coordinator.  
Responsible Person/Group: Interim Chair, Graduate Coordinator, and EES Faculty.  

Graduate Course Evaluations  
Because we met our goal for the last reporting period, we will increase our goal for 2014. All concentration level and graduate level courses required of the degree will achieve at least 3.0 out of 5.0 for overall quality of course.  
Established in Cycle: 2013-14  
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Course evaluations | Outcome/Objective: Student satisfaction  

Implementation Description: Course evaluation scores will be assessed by EES Staff to determine if goal is met. This information will be given to the Interim Chair.  
Responsible Person/Group: EES Staff and Interim Chair.  

Graduate Student evaluations in 5000-level courses  
Students in 5000-level courses will have a minimum of 10% (changed from 20% in last Action Plan) of the final grade derived from PowerPoint presentations. In 2013 we expected 80% of the students to achieve a B or better on their PowerPoint presentations. The actual result was 100%. Based on this result, we will now expect 90% of the students to achieve a B or better on their PowerPoint presentations in 2014.  
Established in Cycle: 2013-14  
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Final grade percentage derived from presentation | Outcome/Objective: Presentation  

Implementation Description: Faculty teaching 5000-level course will provide the Interim Chair with all graduate student grades for PowerPoint presentations.  
Responsible Person/Group: Instructors teaching graduate level courses and Interim Chair.  

Graduate Student written assignment  
In the previous Action Plan, an oral presentation was included with the written assignment. This has been removed as a separate objective. Because EES exceeded our goals in 2013 with 80% of the graduate students achieving a B or better on their written assignment, we will increase our goal for 2014 to 85% achieving a B or better.  
Established in Cycle: 2013-14  
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Written assignment | Outcome/Objective: Technical writing  

Implementation Description: Instructor of Graduate Seminar will provide the Interim Chair with all course grades.  
Responsible Person/Group: Instructor of Graduate Seminar and Interim Chair.  

M.Sc. Oral Presentations  
Because we exceeded our previous goal, we expect 85% of the students will achieve a B or better on their PowerPoint presentations using a grading rubric developed by faculty consensus.  
Established in Cycle: 2013-14  
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Presentations | Outcome/Objective: Presentation  

Implementation Description: Grades for PowerPoint presentations will be provided to the Interim Chair from EES Faculty.  
Responsible Person/Group: Interim Chair and EES Faculty.  

Successful Thesis Defenses  
Of those M.Sc. students attempting to defend in the reporting period, at least 75% will do so successfully. A majority vote of the thesis committee, approved by the graduate school, will find the work scientifically sound, noteworthy, and presented well in oral and written format.  
Established in Cycle: 2013-14  
Implementation Status: Planned  
Priority: High  

Relationships (Measure | Outcome/Objective):  
Measure: Research project | Outcome/Objective: Advanced understanding of concepts  

Implementation Description: Graduate Coordinator will report to the Interim Chair regarding success of thesis defenses.  

Analysis Questions and Analysis Answers  
What specifically did your assessments show regarding proven strengths or progress you made on outcomes/objectives? (Strengths)  
The analyses show that we are doing well even though we have less than half the faculty we had before Katrina and twice as many students.  

[SAMPLE (Suskie, 9/21/10 webinar) used with permission] How do you define a successful student?
A successful graduate student is one who conducts scientific research that is high enough quality such that the results can be published in a peer-reviewed scientific journal.

[SAMPLE (Suskie, 9/21/10 webinar) used with permission] What have you learned about your students’ learning?

We have learned that our graduate students would like to have more graduate-level courses offered during their tenure at EES. Unfortunately this is difficult because we have less than half the faculty we had before Katrina while teaching twice as many students we had before Katrina.

[SAMPLE (Suskie, 9/21/10 webinar) used with permission] Are you satisfied with your results?

Yes, we are satisfied considering we have less than half the faculty we had before Katrina while teaching twice as many students we had before Katrina.

[SAMPLE (Suskie, 9/21/10 webinar) used with permission] If you are not satisfied, what are you doing about it?

Actually, we are satisfied though the stress of having to teach, conduct research, and attend to administrative duties has brought extra levels of stress to our faculty. Remember, we have less than half the faculty we had before Katrina while teaching twice as many students we had before Katrina.