Texas A&M International University Annual Institutional Effectiveness Review (AIER)

<u>Date Submitted</u> February 4, 2007

Assessment Period Covered (2006)

Academic Program/AES Unit Bachelor of Sciences with a major in Environmental Sciences

Person(s) Preparing Review Dr. Sushma Krishnamurthy

Provide summary of the last cycle's use of results and changes implemented

In Y2006 there were no seniors in the environmental sciences. No assessment was conducted.

This year we have decided to focus on critical thinking skills, an essential tool common to all the sciences instead, rather than subject specific assessment. A third indirect assessment has also been added to our student learning outcomes.

Section I: Planning and Implementation

Institutional Mission

Texas A&M International University, a Member of The Texas A&M University System, prepares students for leadership roles in their chosen profession in an increasingly complex, culturally diverse state, national, and global society ... Through instruction, faculty and student research, and public service, Texas A&M International University embodies a strategic point of delivery for well-defined programs and services that improve the quality of life for citizens of the border region, the State of Texas, and national and international communities.

Academic Program or Administrative/Educational Support Unit Mission

The foremost mission of the department is to provide a high quality education for the students in Biology, Chemistry, Environmental Sciences and Geology. Upon completion of the program students will be prepared for employment in the private and public sectors as well as professional and graduate education. The department also strives to increase the body of scientific knowledge through research. We serve the university by providing General Education courses and service courses for students in Nursing, Kinesiology and Education.

Identify outcomes and the relationship to Strategic Plan

Outcome 1	☐ Is this outcome related to writing (QEP)?
Students will apply critical thinking ski	ills to solve problems in Environmnetal Science.
Identify Strategic Plan Goal related	to Outcome 1
Goal 1 Academics	
Identify Strategic Plan Objective rel	ated to Outcome 1

1.7 Establish and pursue student learning outcomes appropriate for each program with systematic assessment and use of results for continuous quality improvement.

Identify methods of assessment to be used

Embedded questions in examinations in required (core) upper division courses (Environmental Sciences (ENSC 3401), Geohydrology (GEOL 3405), Environmental Chemistry (CHEM 3400) and (Ecology BIOL 3410). The questions will be agreed upon by the environmental sciences faculty and the faculty in each of the fields listed.

Indicate when assessment will take place

Annual

Criteria/Benchmark

Seventy percent of the environmental sciences senior students will have applied critical thinking skills to solve problems in the environmental sciences (70% of the embedded examination questions answered correctly).

Students will demonstrate the ability to plan and execute a research project then present the material in a logical manner.

Identify Strategic Plan Goal related to Outcome 2

Goal 2 Research

Identify Strategic Plan Objective related to Outcome 2

2.3 Broaden the educational experience for students through support of student research/scholarship and student participation in faculty research/scholarship

Identify methods of assessment to be used

Means of Assessment Students will present the results of their research projects to a combined group of their peers. Faculty panel of at least 3 will evaluate projects using a common rubric.

Indicate when assessment will take place

Annual

Criteria/Benchmark

Seventy percent of the (environmental sciences) senior students will demonstrate the ability to plan and execute a research project, then present the material in a logical manner.

Student will have utilized their undergraduate education to acquire employment or acceptance in professional graduate programs

Identify Strategic Plan Goal related to Outcome 3

Goal 1 Academics

Identify Strategic Plan Objective related to Outcome 3

1.7 Establish and pursue student learning outcomes appropriate for each program with systematic assessment and use of results for continuous quality improvement.

Identify methods of assessment to be used

Exit survey for graduating seniors. Results of the survey will group students according to the following: employment resulting from the completion of the degree, graduate school placement, professional school placement, and undecided.

Indicate when assessment will take place

Annual

Criteria/Benchmark

No more than 30% of environmental sciences graduating seniors will be undecided in their career options on completion of their degrees.

Section II: Analysis of Results

When (term/date) was assessment conducted? Outcome 1 The Assessment was not conducted Outcome 2 The Assessment was not conducted Outcome 3 The Assessment was not conducted What were the results attained (raw data)? Outcome 1 N/A Outcome 2 N/A Outcome 3 N/A Who (specify names) conducted analysis of data? Outcome 1 N/A Outcome 2 N/A Outcome 3 N/A

When were the results and analysis shared and with whom (department chair, supervisor, staff, external stakeholders)? Submit minutes with data analysis to assessment@tamiu.edu (Please use Minutes Template located on the Project INTEGRATE web page.)

N/A

NOTE: Submit all assessment documentation (i.e., surveys, rubrics, course exams with embedded questions, etc.) to the Office of Institutional Effectiveness and Planning.

been identified based on the data collected?
Outcome 1 Met Not Met Provide narrative: N/A
Outcome 2 Met Not Met Provide narrative: N/A
Outcome 3 Met Not Met Provide narrative: N/A
How have these data-based changes improved your program/unit?

Use of Results: Indicate whether criteria were met/not met and what changes, if any, have

Section III: Programmatic Review			
Are resources affected by the changes identified in Section II? Yes No			
If so, specify the effect(s) using the chart below:			
Funding	Physical	Other	
New resources required	New or reallocated	Primarily faculty/staff	
New resources required		<u> </u>	
	space	time	
Reallocation of current		University rule/procedure	
funds		change only	
		Other: Enter text here	
Provide a narrative description and justification for requested resources (include linkage to			
Strategic Plan)			
Enter text here			
Enter text nere			
Identify proposed outcomes f	or the next assessment cycle		
Continuation of present outcom	ne(s) – (Indicate reason for con	ntinuation):	
Enter text here			
New Outcome(s) – (List outcomes below):			
Enter text here			
Modification of present outcome(s) – (Indicate reason for modification):			
Enter text here			
**** This section to be completed by dean/director/vice-president ****			
This section to be completed by dean/diffector/vice-president			
Are resources requested a prio	rity for the academic progra	am/AES unit?	
☐ Yes ☐ No			
Comments:			
Enter text here			
If funding, physical or other resources were requested, what is the impact of the budget			
decisions on the academic program/AES unit?			
Enter text here			