

**Texas A&M International University  
Annual Institutional Effectiveness Review (AIER)  
for Academic Programs**

Program: BS in Biology

Assessment Period Covered: **January 1, 2009 to January 31, 2010**

Program Coordinator (Preparer of Report) Tom Vaughan

**List Other Program Faculty:**

<b>Beck, Daniel, Kidd, McReynolds, Mendez, Mott, Quintana, Vaughan, Wilson, Ynalvez</b>

Reviewed by Chair: Name D. Mott Date **3 March 2010**

Reviewed by Dean: Name \_\_\_\_\_ Date \_\_\_\_\_

**The Annual Institutional Effectiveness Review for Academic Programs is directed at Goal 1: Academics of the Texas A&M International University 2006-2010 Strategic Plan:**

Develop, maintain, assess, and improve academic programs, administrative/educational support services and student services, to admit, retain, and graduate students who achieve established learning outcomes designed to prepare them for success in their chosen careers.

**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 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.

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

*Program faculty should evaluate the former cycle. This statement should specify if the outcomes addressed were a continuation of previous ones, new outcomes, or modified versions of previous outcomes. In addition, the statement should include a concise analysis of the assessment data collected during the previous year, a brief explanation of actions taken to address specific outcomes, an evaluation of how these actions contributed to the improvement of the program, and any recommendations formulated. Assessment data—including actual samples of student work—must be viewed and discussed by program faculty during this process.*

Enter text here

**Selected list of program-level intended student learning outcomes** *(It is recommended that programs rotate through their entire set of outcomes over a multi-year period. Programs may focus on one or two outcomes each year, as deemed appropriate).*

1. Students will apply critical thinking skills to solve problems in biology.
2. Students will demonstrate the ability to plan and execute a research project then present the material in a logical manner.
3. Student will have utilized their undergraduate education to acquire employment or acceptance in professional graduate programs.

Section I: Planning and Implementation

**Outcome(s)**

*Identify the outcome(s) that will be focused upon this year.*

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

**Please indicate if the outcome(s) is (are) related to writing (QEP).**

**Methods of assessment to be used:** *The explanation should identify and describe the type of assessment(s) that will be used (e.g., survey, questionnaire, observation instrument, test, rubric to evaluate performance, standardized examination, action research, interviews, etc.), who will provide the information, and how the data will be obtained.*

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(s) will take place**

Each semester

**Criteria/Benchmark(s):** *[Specify, if deemed appropriate to assess outcome(s). Criteria/ benchmark(s) may be optional, especially if qualitative measures are used for data collection.]*

Seventy percent of the senior students will demonstrate the ability to plan and execute a research project, then present the material in a logical manner by achieving a mean score of 7/10 as judged by a minimum of 3 faculty using a common rubric.

## Section II: Analysis of Results

### **What were the results attained?**

*Describe the primary results or findings from your analysis of the information collected. This section should include an explanation of any strength(s) or weakness(es) of the program suggested by the results.*

Enter text here

Students were able to plan and execute a research project, then present the material in a logical manner. The mean score for this group of students was 7.84/10. All presentations were judged by between four and nine faculty using a common rubric.

### **What were the conclusions reached?**

*Should include a brief description of the procedure used for reaching the conclusion(s) based on the evidence collected and describe the process used to disseminate the information to other individuals. For example, if the discussion took place during the annual spring retreat, include a summary from those deliberations using the Meeting Minutes template found on the Project Integrate web page at <http://www.tamtu.edu/integrate/docs/Minutes-Template.doc>. Once completed, submit the minutes to [assessment@tamtu.edu](mailto:assessment@tamtu.edu).*

A common rubric was used by all faculty to judge the success of the students throughout the symposium. Results indicate that the department continues to do a very good job in the arena of mentoring undergraduate research and that our students in general are well prepared in this area.

### **Describe the action plan formulated. (The plan may be multi-year in nature.)**

*Based on the conclusion(s), describe the action plan to be implemented to improve or maintain student learning, including a timeline for implementation.*

Enter text here

We anticipate continuing with the current format.

### Section III: Resources

**Resource(s) to implement action plan:**

*Describe the resources that will be needed to implement the action plan. Also indicate if the resources are currently available, or if additional funds will be needed to obtain these resources.*

**Funding**

- New Resources Required
- Reallocation of current funds

**Physical**

- New or reallocated space

**Other**

- Primarily faculty/staff time
- University/rule procedure change only

**Provide a narrative description and justification for requested resources (include linkage to Strategic Plan)**

Enter text here

**Identify proposed outcomes for the next assessment cycle:**

Continuation of present outcome(s) – (Indicate reason for continuation):

Enter text here

New Outcome(s) – (List outcomes below):

Enter text here

Modification of present outcome(s) – (Indicate reason for modification):

Enter text here

Date Completed: March 3, 2010

Submit completed form to [integrate@tamiu.edu](mailto:integrate@tamiu.edu).

Updated 09/03/2009