

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

Date Submitted January 31, 2008

Assessment Period Covered (2007)

Academic Program/AES Unit Bachelor of Arts with a major in Physical Science

Person(s) Preparing Review Eduardo Chappa

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

No students graduated in this program in 2006.

Section I: Planning and Implementation
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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 faculty and staff of the Department of Mathematical and Physical Sciences are committed to excellence in teaching, research, service and outreach. The Department provides a foundation in Mathematical and Physical Sciences for all undergraduates as well as teacher certification programs from mathematics and physical sciences majors and graduate students. The programs within the Department lead to discovery, analysis and dissemination of mathematics, statistics and physics knowledge. Our goals are to equip the graduate with the tools necessary to fully participate in a technological society and competitive global environment. The department is committed to:

1. Transmit mathematical and physical science ideas through teaching and related activities;
2. Contribute to the advancement of mathematics and physics through quality research;
3. Utilize the department's resources to aid the University and community in the allocations of mathematics and physics; and
4. To serve as a resource of mathematical and physical knowledge and pedagogy for the University and community.

Identify outcomes and the relationship to Strategic Plan

Outcome 1

Is this outcome related to writing (QEP)?

Students completing the physical science program will demonstrate skills related to applying the fundamental principles of physical science.

Identify Strategic Plan Goal related to Outcome 1

Goal 1 Academics

Identify Strategic Plan Objective related to Outcome 1

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

Identify methods of assessment to be used

Graduating students will take part in a tentative physical science related program towards the end of their senior year by taking the major field test in Physics by ETS.

Indicate when assessment will take place

Annual

Criteria/Benchmark

70% of the students taking the standardized examination will score at or above the national 50th percentile.

Outcome 2

Is this outcome related to writing (QEP)?

Students completing the physical science program will demonstrate an ability to analyze and interpret the data of physical science phenomena including applications of computers and software.

Identify Strategic Plan Goal related to Outcome 2

Goal 1 Academics

Identify Strategic Plan Objective related to Outcome 2

1.4 Prepare students for success in their chosen careers.

Identify methods of assessment to be used

Students are required to analyze and interpret the data of physical science phenomena. Assessment will be from the reports in projects as part of PHYS 3310.

Indicate when assessment will take place

Annual

Criteria/Benchmark

More than 75% of the students will perform with a final grade of "C" or better, based on the requirements for the course.

Outcome 3

Is this outcome related to writing (QEP)?

Students completing the physical science program will learn to communicate, in form and content, verbally and in written form, the results of physical science investigations.

Identify Strategic Plan Goal related to Outcome 3

Goal 1 Academics

Identify Strategic Plan Objective related to Outcome 3

1.4 Prepare students for success in their chosen careers.

Identify methods of assessment to be used

Students will be required to write a paper and give an oral presentation in PHYS 3310 "Modern Physics".

Indicate when assessment will take place

Annual

Criteria/Benchmark

Written report and oral presentations of each student who takes PHYS 3310 will be evaluated by at least two faculty members on a scale 0-100. More than 75% of students will receive an average score of 70 or better in the written and oral presentation.

Section II: Analysis of Results

When (term/date) was assessment conducted?

Outcome 1

These outcomes are new to this program, no assessment has been conducted.

Outcome 2

Enter text here

Outcome 3

Enter text here

What were the results attained (raw data)?

Outcome 1

Enter text here

Outcome 2

Enter text here

Outcome 3

Enter text here

Who (specify names) conducted analysis of data?

Outcome 1

Enter text here

Outcome 2

Enter text here

Outcome 3

Enter text here

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.)

Enter text here

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

Use of Results: Indicate whether criteria were met/not met and what changes, if any, have been identified based on the data collected?

Outcome 1

Met Not Met

Provide narrative: Enter text here

Outcome 2

Met Not Met

Provide narrative: Enter text here

Outcome 3

Met Not Met

Provide narrative: Enter text here

How have these data-based changes improved your program/unit?

Enter text here

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
<input type="checkbox"/> New resources required	<input type="checkbox"/> New or reallocated space	<input type="checkbox"/> Primarily faculty/staff time
<input type="checkbox"/> Reallocation of current funds		<input type="checkbox"/> University rule/procedure change only
		<input type="checkbox"/> Other: Enter text here

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

**** This section to be completed by dean/director/vice-president ****

Are resources requested a priority for the academic program/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