

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

Date Submitted November 30, 2005

Assessment Period Covered (FY 2005)

Budget Period Covered (FY 2005)

Academic Program/AES Unit Bachelor of Science with a Major in Mathematics

Person Preparing Review Terutake Abe

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

n.a.

Provide summary of budget decisions and their impact on your program/division.

n.a.

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/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 undergraduate students as well as teacher certification programs for 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 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 relationship to Strategic Plan

Outcome 1

Students will demonstrate their mastery of formulating and solving problems in various areas of mathematics.

Identify Strategic Plan Goal related to Outcome 1

Goal 2 Academic

Identify Strategic Plan Objective and Strategy related to Outcome 1 (Appendix A – Strategic Goals)

Continue to provide programs and services that assist potential, current, and former students to identify, explore, and select career programs and employment opportunities.

Methods of assessment

Graduating students will be required to take part in pilot study program towards the end of their final semester of studies by taking the Major Field Test in mathematics by ETS.

Frequency of administration

Every semester.

Criteria/Benchmark

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

Outcome 2

Students will be able to communicate mathematics in well-structured sentences.

Identify Strategic Plan Goal related to Outcome 2

Goal 2 Academic

Identify Strategic Plan Objective and Strategy related to Outcome 2 (Appendix A – Strategic Goals)

Establishment of a Writing Center

Methods of assessment

We have proposed a new course, Technical Writing for the Sciences, NSCI 2311 (the proposal is under review by the College Curriculum Committee), and will use the pass rate of this course for the assessment.

Frequency of administration

Every semester

Criteria/Benchmark

50% of students taking NSCI 2311 will pass the course with a grade of C or above.

Outcome 3

Students will be able to undertake independent work, explore ideas, discover mathematics and develop correct mathematical arguments and proofs of their discoveries.

Identify Strategic Plan Goal related to Outcome 3

Goal 2 Academic

Identify Strategic Plan Objective and Strategy related to Outcome 3 (Appendix A – Strategic Goals)

Provide quality instruction to prepare graduates for leadership roles in their chosen profession.

Methods of assessment

Graduating students will be required to take part in pilot study program towards the end of their final semester of studies by taking the Major Field Test in mathematics by ETS.

Frequency of administration

Every semester

Criteria/Benchmark

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

Section II: Analysis of Results

When (term/date) was assessment conducted?

Outcome 1
Spring 2005

Outcome 2
Spring 2005

Outcome 3
Spring 2005

What were the results attained (raw data)?

Outcome 1
No students took the Major Field Test.

Outcome 2
No students took the Major Field Test

Outcome 3
No students took the Major Field Test

Who (specify names) conducted analysis of data?

Outcome 1
Terutake Abe

Outcome 2
Terutake Abe

Outcome 3
Terutake Abe

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

n.a.

Has the assessment documentation (i.e., surveys, rubrics, course exams with embedded questions, etc.) been submitted to the Office of Institutional Effectiveness and Planning?

No

Use of Results: Indicate what changes, if any, based on the data have been recommended?

Outcome 1

n.a.

Outcome 2

n.a.

Outcome 3

n.a.

Section III: Programmatic Review

What are the implications of the recommended changes?

n.a.

Will resources be affected by the recommended changes? Yes No

If so, specify the anticipated 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

Narrative description and justification for request including related strategy (Attach Budget Request 'Form B' and/or 'Form C')

Enter text here

If funding, physical or other resources were requested, what is the impact of the budget decisions on program/division?

Enter text here

In the box below, provide information on the outcomes for the next assessment cycle:

Outcomes for Next Assessment Cycle
Continuation of present outcome(s) - (Indicate reason for continuation): We need to collect more data.
New Outcome(s) – (List outcomes below): Enter text here
Modification of present outcome(s) – (Indicate reason for modification): Enter text here