# 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)**

<u>Academic Program/AES Unit</u> Bachelor of Science in Interdisciplinary Studies Major in Mathematics with Grades 4th-8th Certification

Person Preparing Review Terutake Abe

<u>Provide summary of the last cycle's use of results and changes implemented.</u> We offered a TExES Review course in the Spring 2005 semester. One student from this program enrolled.

**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

Pre-service teachers (students) will take The Texas Examinations of Educator Standards (TExES) in mathematics for grade 4-8.

#### **Frequency of administration**

Every semester.

#### **Criteria/Benchmark**

The pass rate of 70% for a cohort of students in a particular semester on TExES Mathematics 4-8 (TEST 115) will be considered satisfactory.

#### **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 Curriclum 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 develop a variety of examples to illustrate mathematical concepts, to present several ways of solving a problem, and to illustrate applications of mathematical ideas to real situations.

#### **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

Pre-service teachers (students) will take The Texas Examinations of Educator Standards (TExES) in mathematics for grade 4-8.

**Frequency of administration** 

Every semester

#### **Criteria/Benchmark**

The pass rate of 70% for a cohort of students in a particular semester on TExES Mathematics 4-8 (TEST 115) will be considered satisfactory

#### 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** One student took the TEXES Mathematics TEST 115 and did not pass.

#### **Outcome 2**

One student took the TEXES Mathematics TEST 115 and did not pass.

#### Outcome 3

One student took the TEXES Mathematics TEST 115 and did not pass.

#### 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.)

8/30/05, 8/31/05 and 9/7/05 with department chair.

# 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

## <u>Use of Results: Indicate what changes, if any, based on the data have been recommended</u>? Outcome 1

We offer TExES Review sessions.

**Outcome 2** We offer TExES Review Sessions.

**Outcome 3** We offer TExES Review Sessions.

#### 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	
	New resources required	New or reallocated		Primarily faculty/staff
		space		time
	Reallocation of current			University rule/procedure
	funds			change only
				Other: Enter text here

### <u>Narrative description and justification for request including related strategy</u> (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):

There still is room for improvement.

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

Enter text here

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

Enter text here