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

Date Submitted February, 2007

Assessment Period Covered (2006)

Academic Program/AES Unit Master of Science in Mathematics

Person(s) Preparing Review Dr. Terutake Abe, Dr. Carol Waters

Provide summary of the last cycle’s use of results and changes implemented
This is a new degree; no previous reports have been submitted. Note that the outcomes listed below are those identified in the degree proposal and will be modified and enlarged by faculty during 2007 as they prepare for the first graduates. We recognize that a direct learning outcome is needed. The outcomes listed in the degree proposal are all indirect.

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 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 the relationship to Strategic Plan

Outcome 1  
Students who complete the MS Mathematics degree will be successful in seeking admission to Ph.D. programs.

Identify Strategic Plan Goal related to Outcome 1
Goal 1 Academics

Identify Strategic Plan Objective related to Outcome 1
1.2 Support a student-centered learning environment supported by excellent teaching.

Identify methods of assessment to be used
Percentage of students seeking admission to Ph.D. programs who are admitted.

Indicate when assessment will take place
Annual

Criteria/Benchmark
80% of students seeking admission to Ph.D. programs are admitted.

Outcome 2
Students seeking careers in secondary or higher education will have the appropriate skills in mathematics.

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
Identify the percentage of students seeking careers in secondary or higher education mathematics teaching who are employed in that field within one year of graduation.

Indicate when assessment will take place
Annual

Criteria/Benchmark
80% of students who seek employment in secondary or higher education mathematics teaching will be employed in that field within one year of graduation.

Outcome 3
Students who wish to pursue careers in industry or government will be successful in finding employment related to their degree field.
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
Survey graduates to determine employment status.

Indicate when assessment will take place
Annual

Criteria/Benchmark
80% of graduates who seek employment in areas related to their field of study will be successful.
Section II: Analysis of Results

When (term/date) was assessment conducted?
Outcome 1
New degree. Assessments have not 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:

<table>
<thead>
<tr>
<th>Funding</th>
<th>Physical</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ New resources required</td>
<td>□ New or reallocated space</td>
<td>□ Primarily faculty/staff time</td>
</tr>
<tr>
<td>□ Reallocation of current funds</td>
<td></td>
<td>□ University rule/procedure change only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Other: Enter text here</td>
</tr>
</tbody>
</table>

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