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

**Date Submitted** January 10, 2008

**Assessment Period Covered (2007)**

**Academic Program/AES Unit** Master of Science in Biology

**Person(s) Preparing Review** Dr. Josh Stevenson

**Provide summary of the last cycle’s use of results and changes implemented**
The first cohort of graduate students in this program have advanced through their comprehensive exams achieving the benchmark of outcome number one. None of these students have progressed to the point of defending theses or presenting literature reviews and consequently no data has been generated regarding outcomes two and three.

**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 or Administrative/Educational Support Unit 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.

**Identify outcomes and the relationship to Strategic Plan**

**Outcome 1**

☐ Is this outcome related to writing (QEP)?
Students will strengthen their critical thinking skills to solve problems in biology.

**Identify Strategic Plan Goal related to Outcome 1**
Goal 1 Academics

**Identify Strategic Plan Objective related to Outcome 1**
1.7 Establish and pursue student learning outcomes appropriate for each program with systematic assessment and use of results for continuous quality improvement.

**Identify methods of assessment to be used**
Critical thinking questions will be embedded in the students' comprehensive examinations. The questions will be agreed upon by biology faculty in each of the fields tested. The examination will be offered twice a year.

**Indicate when assessment will take place**
Annual

**Criteria/Benchmark**
Masters students will score 80% on critical thinking questions.

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**Outcome 2**

☐ Is this outcome related to writing (QEP)?

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

**Identify Strategic Plan Goal related to Outcome 2**
Goal 2 Research

**Identify Strategic Plan Objective related to Outcome 2**
2.3 Broaden the educational experience for students through support of student research/scholarship and student participation in faculty research/scholarship

**Identify methods of assessment to be used**
Literature based research will be presented by students in the non-thesis degree option. Those choosing the thesis option will present their theses. Students will present the results of their research to a combined group of their peers. Faculty panel of at least 3 will evaluate projects using a common rubric.

**Indicate when assessment will take place**
Annual

**Criteria/Benchmark**
Eighty percent of the masters students will demonstrate the ability to present their research in a logical manner.

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**Outcome 3**

☒ Is this outcome related to writing (QEP)?

Students will be able to write a well organized scientific paper.

**Identify Strategic Plan Goal related to Outcome 3**
Goal 1 Academics

**Identify Strategic Plan Objective related to Outcome 3**
1.7 Establish and pursue student learning outcomes appropriate for each program with systematic assessment and use of results for continuous quality improvement.

**Identify methods of assessment to be used**
Student writing will be assessed by a group of at least 3 faculty members, based on a common rubric. The Graduate Seminar class will be used for the assessment.

**Indicate when assessment will take place**
Annual

**Criteria/Benchmark**
We expect the masters students to score 80% in the assessment.
Section II: Analysis of Results

When (term/date) was assessment conducted?
Outcome 1
Academic year 2007

Outcome 2
No assessment required

Outcome 3
No assessment required

What were the results attained (raw data)?
Outcome 1
All students who attempted their comprehensive exams in fall 2007 received a passing graduate grade (80% or greater). Four students took and passed their comprehensive exams (Adriana Gonzalez, Jesus Segovia, Julianna Quintanilla, and Oscar Ramos).

Outcome 2
No research projects have been executed to this date.

Outcome 3
No theses or literature reports have been completed to this date.

Who (specify names) conducted analysis of data?
Outcome 1
Dr. Josh Stevenson

Outcome 2
No analysis required.

Outcome 3
No analysis required.

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.)
Results will be shared with department during January 2008 departmental meeting.

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: All students who attempted their comprehensive exams in fall 2007 received a passing graduate grade (80% or greater).

Outcome 2
☒ Met ☐ Not Met
Provide narrative: No data available for outcome 2.

Outcome 3
☒ Met ☐ Not Met
Provide narrative: No data available for outcome 3

How have these data-based changes improved your program/unit?
No changes have been made to this program.
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)

None requested

Identify proposed outcomes for the next assessment cycle:

Continuation of present outcome(s) – (Indicate reason for continuation):
Present outcomes are satisfactory.

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

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

Are resources requested a priority for the academic program/AES unit?
□ Yes   ☒ No

Comments:

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