

Administrative and Educational Support Report*

Department of Biology

**Annual Action Plan
Annual Assessment Report**

June 2007 – May 2008

*Student Learning Outcomes for this department are available at
<http://www.ie.utpa.edu/CoBALearningOutcomes.htm>



Annual Action Plan: June 1, 2007–May 31, 2008

Unit: **Department of Biology**

UTPA Mission: The University of Texas-Pan American (UTPA) serves the higher education needs of a rapidly growing, international, multicultural population in the South Texas Region. The University preserves, transmits and creates knowledge to serve the cultural, civic, and economic advancement of the region and the state. The University provides students advanced instruction in academic programs offered through innovative delivery systems that lead to professional certification, and baccalaureate, master’s and doctoral degrees. Through teaching, research, creative activity and public service, UTPA prepares students for lifelong learning and leadership roles in the state, nation and world community.

Division: **Biology**

Unit Head: **Dr. Mohammed Farooqui**

Unit Mission: The Department of Biology supports the mission statement of The University of Texas – Pan American by committing to excellence in instruction, student performance, research, scholarly accomplishment, and professional service, and by promoting the expansion of national and international emphasis in all major areas of institutional endeavor. The Department strives to provide its students and faculty an environment of academic freedom that will insure the exchange of ideas and the dissemination of knowledge. The Department will provide a strong scientific and technical foundation for all students of the university. The Department will continue to pursue a strong research program involving undergraduate and graduate students and faculty in all areas of science and a strong teacher preparation program in science and technology.

UTPA Goal: 1. Provide UTPA students with a quality experience that enables them to complete their educational goals in a timely fashion.

Academic Affairs Objective: 1.A. The Provost Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking and improving continuance of students in degree programs as measured by key outcome measures associated with students in continuance degree programs.

College/AVP Objective: 1.A: The COSE Dean’s Office will work with its departments to establish a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures associated with continuance of students in degree programs as measured by these outcomes.

Department Objective: 1.A: The Department of Biology will establish a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures associated with continuance of students in degree programs as measured by these outcomes.

Annual Action Plan June 1, 2007–May 31, 2008

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
<p>Establish a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures associated with the continuance of students in degree programs.</p>	<p>Data collected.</p>	<p>The Department of Biology will request from OIRE data on the 5 year performance measures at UTPA:</p> <ul style="list-style-type: none"> a. 4 and 6 year graduation rates for each major and for the Department. b. retention rates in each major and for the majors at freshman, sophomore, junior and senior levels c. Years to graduation for our majors d. Success in gatekeeper courses offered in our department. 	<p>Standard statistical analysis.</p>	

UTPA Goal:

1. Provide UTPA students with a quality experience that enables them to complete their educational goals in a timely fashion.

Academic Affairs Objective:

1.B. The Provost Office will work with the Colleges (and departments) to establish a systematic methodology for the collection, reporting, benchmarking and improving of the key outcome measures associated with enhancing student learning outcomes.

Annual Action Plan June 1, 2007–May 31, 2008

College/AVP Objective: 1.B. The College of Science and Engineering will assist the departments in establishing a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with enhancing student learning outcomes and will improve student learning as measured by these outcomes

Department Objective: 1.B. The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with enhancing student learning outcomes and will improve student learning as measured by these outcomes

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
The Department of Biology will assist in establishing a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with the enhancement student learning outcomes and will improve student learning as measured by these outcomes.	<p>Students will be successful in their courses.</p> <p>100% of students graduating as Biology majors will be assessed on a departmental assessment at the end of every semester.</p> <p>Improvement of 1% in the success rate of students as compared to the previous semester.</p>	<p>Work with Registrar's Office to obtain necessary class grade distributions.</p> <p>Using the list of Biology graduating students provided by the AA Research Analyst every semester, conduct assessment of student learning outcomes.</p> <p>Analyze results every semester and make changes/improvements to the curriculum, program, instruction, and/or faculty/instructors based on results.</p>	<p>Standard statistical analysis.</p> <p>Plans for improvement of curriculum, instruction, program, and/or faculty/instructors.</p>	None

UTPA Goal: 1. Provide students with a quality educational experience that enables them to complete their educational goals in a timely fashion.

Academic Affairs 1.C. The Provost Office will work with the Colleges (and departments) to establish a systematic methodology for the collection, reporting, benchmarking and improving of the key outcome measures associated with increasing access to our educational

Annual Action Plan June 1, 2007–May 31, 2008

Objective: programs.

College/AVP Objective: 1.C. The College of Science and Engineering will assist its departments to establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with increasing access to our educational programs and will improve access as measured by these outcomes.

Department Objective: 1.C. The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with increasing access to our educational programs and will improve access as measured by these outcomes.

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
The Department of Biology will assist the University to establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with increasing access to our educational programs and will improve access as measured by these outcomes.	%??? Annual increases in enrollment trends for Department of Biology course offerings.	Work with OIRE to obtain data relating to class roll sizes and historical trends. What can you do to increase access to Biology majors? Recruitment?	Standard statistical methods.	

UTPA Goal: 1. Provide students with a quality educational experience that enables them to complete their educational goals in a timely fashion.

Annual Action Plan June 1, 2007–May 31, 2008

**Academic
Affairs
Objective:**

Objective 1.D. The Provost Office will establish at least 2 teaching improvement workshops each semester to encourage faculty to improve their classroom effectiveness.

**College/AVP
Objective:**

1.D: The COSE will work with its departments to encourage and reward faculty members who participate in professional development workshops in the area of teaching effectiveness.

**Department
Objective:**

1.D: The Department of Biology will encourage and reward faculty members who participate in professional development workshops in the area of teaching effectiveness.

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Identify causes that prevent students from completing their educational goals in a timely fashion.	Gather data on success rates and hours worked outside and high preparation.	Cooperate with OIRE to obtain necessary data.	Standard statistical analysis	

UTPA Goal:

2. Become an outstanding research institution emphasizing collaborative partnerships and entrepreneurship.

**Academic
Affairs
Objective:**

2.A. The Provost's Office will support the Colleges and Departments to establish systematic methodology for the collection, reporting, benchmarking, and to improve the production and dissemination of scholarly and creative works as measured by key outcome measures.

**College/AVP
Objective:**

2.A. The College of Science and Engineering will support its departments to establish systematic methodology for the collection, reporting, and benchmarking of the key outcome measures for scholarly productivity and will increase scholarly productivity of its tenured/tenure track faculty, as measured by these outcomes.

Department

2.A. The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking of the

Annual Action Plan June 1, 2007–May 31, 2008

Objective: key outcome measures for scholarly productivity and will increase scholarly productivity of its tenured/tenure track faculty, as measured by these outcomes.

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Establish systematic methodology for the collection, reporting, and benchmarking to improve the production and dissemination of scholarly and creative works as measured by key outcome measures.	Gather data on scholarly publications and creative works on an annual basis for comparative purposes. What is your goal for the end of this year? How much do you want to improve? By how many?	Extract data from Annual Evaluation folders. What do you propose to do to "improve the production and dissemination of scholarly and creative works?"	Standard statistical analysis How will you know you have reached your goal?	

UTPA Goal: 2. Become an outstanding research institution emphasizing collaborative partnerships and entrepreneurship.

Academic Affairs Objective: 2.B. The Provost's Office will support the Colleges and Departments to establish systematic methodology for the collection, reporting, benchmarking, and to improve the acquisition of external funds as measured by key outcome measures, and will increase the acquisition of external funds, as measured by the key outcome measures.

College/AVP Objective: 2.B. The College of Science and Engineering will assist its departments to establish a systematic methodology for the collection, reporting, and benchmarking and of key outcome measures for the acquisition of external funds and will improve the acquisition of external funds, as measured by these outcomes.

Department Objective: 2.B. The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking and of key outcome measures for the acquisition of external funds and will improve the acquisition of external funds, as measured by these outcomes.

Unit Objective	Measurable Outcomes and Criteria for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Establish a systematic methodology for the collection, reporting, and benchmarking of key outcome measures for the acquisition of external funds and to improve the acquisition of external funds , as measured by these outcomes.	Gather data on acquisition of external funding and submitted grant proposals.	Extract data from Annual Evaluation folders.	Standard statistical methods.	

UTPA Goal:

3. Enhance UTPA’s engagement with the community to meet the challenges and maximize opportunities.

Academic Affairs Objective:

3.A The Provost’s Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking and to increase credit and non-credit course offerings as measured in the key outcome measures.

College/AVP Objective:

3.A The College of Science and Engineering will assist its departments in establishing a systematic methodology for collecting, reporting, and benchmarking of key outcomes for credit and non-credit course offerings and will increase credit and non-credit course offerings as measured by these outcomes.

Department Objective:

3.A The Department of Biology will establish a systematic methodology for collecting, reporting, and benchmarking of key outcomes for credit and non-credit course offerings and will increase credit and non-credit course offerings as measured by these outcomes.

Annual Action Plan June 1, 2007–May 31, 2008

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Identify potential forums for interaction with community elements.	Listing of established and newly identified forums.	Survey faculty for new forums and identify existing forums for Annual Evaluation folders.	Standard statistical methods.	

UTPA Goal:

3. Enhance UTPA's engagement with the community to meet the challenges and maximize opportunities.

Academic Affairs Objective:

3.B. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking and to improve the integration of University and community resources as measured in the key outcome.

College/AVP Objective:

3.B. The College of Science and Engineering will assist its departments in establishing a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures that measure University participation in professional and community activities and will increase University participation in professional and community activities as measured by these outcomes.

Department Objective:

3.B. The Department of Biology will establish a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures that measure University participation in professional and community activities and will increase University participation in professional and community activities as measured by these outcomes.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Identify potential resources for interaction with community elements.	A list of identified resources. Increase by one the number of co-sponsored events, (conferences, HESTEC, FESTIBA) with community organizations	Survey faculty for new resources and identify existing forums from Annual Evaluation folders.	The Department will keep track of participation of faculty and student participation in professional and community based activities through the Merit and Tenure and Promotion documents	

Annual Action Plan June 1, 2007–May 31, 2008

UTPA Goal: 4. Collaborate with P-12 schools to enlarge the pool of applicants who are personally prepared and academically qualified for higher education.

Academic Affairs Objective: 4.A. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking, and to improve the pool of qualified applicants as measured in the key outcome measures.

College/AVP Objective: 4.A. The College of Science and Engineering will support its departments to establish a systematic methodology for the collection, reporting and benchmarking of data related to P-12 education in relation to the continuance of students in science and mathematics education programs, and will improve the continuance rates of students in these programs.

Department Objective: 4.A. The Department of Biology will establish a systematic methodology for the collection, reporting and benchmarking of data related to P-12 education in relation to the continuance of students in science and mathematics education programs, and will improve the continuance rates of students in these programs.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
The Department of Biology will support the University to establish a systematic methodology for the collection, reporting, and benchmarking, and to improve the pool of qualified applicants as measured in the key outcome measures.	A University systematic methodology for collection, reporting, and benchmarking will be successful.	Department will cooperate with both the University and College in these efforts.	Standard statistical analysis.	

UTPA Goal: 4. Collaborate with P-12 schools to enlarge the pool of applicants who are personally prepared and academically qualified for higher education.

Academic Affairs Objective: 4.B. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking, and to improve the pool of qualified applicants as measured in the key outcome measures.

College/AVP Objective: 4.B. The College of Science and Engineering will support its departments in establishing a systematic methodology for the collection, reporting and benchmarking of data related to P-12 education, and will **improve** the pool of qualified applicants in science and mathematics education programs, as measured in the key outcome measures.

Department Objective: 4.B. The Department of Biology will establish a systematic methodology for the collection, reporting and benchmarking of data related to P-12 education, and will **improve** the pool of qualified applicants in science and mathematics education programs, as measured in the key outcome measures.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
(See previous Objective 4A)				

UTPA Goal: 5. Infuse inter-American and global perspectives throughout the University community.

Academic Affairs Objective: 5.A. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking, and to enhance access to inter-American and global perspectives as measured in the key outcome measures.

Annual Action Plan June 1, 2007–May 31, 2008

College/AVP Objective:

5.A. The College of Science and Engineering will assist its departments in establishing a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures for enhancing access to inter-American and global perspectives and will enhance access to inter-American and global perspectives as measured in these outcomes.

Department Objective:

5.A. The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures for enhancing access to inter-American and global perspectives and will enhance access to inter-American and global perspectives as measured in these outcomes.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
Sustain and foment existing diversity.	Make a categorized list of international affiliations, backgrounds, and activities, including participation in International Week, Pan Am Days, study abroad opportunities, international publications, and such.	Poll faculty and obtain data from Annual Evaluation folders.	Standard statistical methods.	
The Department will engage in activities that provide opportunities for faculty and students to gain international experience	<ul style="list-style-type: none"> a. Collect data to benchmark the number of active partnerships that yield instructional, research, or service benefits to the institution and its faculty b. Number of international internships. c. Number of faculty with international experiences through Fulbright and similar faculty experiences d. Number of International presentations 	The Department will facilitate faculty and student engagement in activities that include international experiences	The Department will keep track of faculty and student engagement in activities that include international experiences based activities through the Merit and Tenure and Promotion documents	

UTPA Goal:

6. Optimize institutional effectiveness and efficiency with high quality organization standards.

**Academic
Affairs
Objective:**

6.A. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking, and to optimize course offerings through careful planning, as measured in the key outcome measures.

**College/AVP
Objective:**

6.A. The College of Science and Engineering will assist its departments in establishing a systematic methodology for collecting, reporting, and benchmarking of key outcome measures for optimizing course offerings and will improve the optimization of course offerings as measured by these outcomes.

**Department
Objective:**

6.A. The Department of Biology will establish a systematic methodology for collecting, reporting, and benchmarking of key outcome measures for optimizing course offerings and will improve the optimization of course offerings as measured by these outcomes.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
<p>The Department of Biology will examine recent trends on course scheduling. The Department will establish a systematic methodology for the collection of, reporting of, and benchmarking of assessment data for optimizing course offerings and will improve the optimization of course offerings as measured by these outcomes.</p>	<p>A list of class conflicts and graphical and tabular data outputs.</p> <p>Maximize faculty, classroom and lab use.</p>	<p>Cooperate with Registrar's Office and R-25 to obtain basic data.</p>	<p>Standard statistical analysis.</p>	

UTPA Goal:

6. Optimize institutional effectiveness and efficiency with high quality organization standards.

**Academic
Affairs
Objective:**

6.B. The Provost's Office will support the Colleges and Departments to establish a systematic methodology for the collection, reporting, benchmarking, and to recruit and retain quality faculty, as measured in the key outcome measures.

**College/AVP
Objective:**

6.B. The College of Science and Engineering will work with its departments to establish a systematic methodology for the collecting, reporting, and benchmarking of key outcome measures related **to recruiting quality faculty and will increase the recruiting of qualified faculty**, as measured by these outcomes.

**Department
Objective:**

6.B. The Department of Biology will establish a systematic methodology for the collecting, reporting, and benchmarking of key outcome measures related **to recruiting quality faculty and will increase the recruiting of qualified faculty**, as measured by these outcomes.

Unit Objective	Measurable Outcome for Unit Objective	Strategy(ies) to Achieve Unit Objective	Evaluation Methods for Measurable Outcome	New Resources Needed in FY08
The faculty will establish a systematic methodology for the collection of, reporting of, and benchmarking of outcome measures relating to the recruitment and retention of faculty.	Tabular data of recruited and retained faculty.	Cooperate with Department Search Committee to obtain data and survey current faculty for perceived problems.	Standard statistical analysis.	

AES FY08 Assessment Results Report

UTPA

Dept - Biology

Unit Mission: The Department of Biology supports the mission statement of The University of Texas-Pan American by committing to excellence in instruction, student performance, research, scholarly accomplishment, and professional service, and by promoting the expansion of national and international emphasis in all major areas of institutional endeavor. The Department strives to provide its students and faculty an environment of academic freedom that will insure the exchange of ideas and the dissemination of knowledge. The Department will provide a strong scientific and technical foundation for all students of the university. The Department will continue to pursue a strong research program involving undergraduate and graduate students and faculty in all areas of science and a strong teacher preparation program in science and technology.

Unit Head: Mohammed Farooqui

College: College of Science and Engineering

Division: Division of Academic Affairs

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>Dept - Biology - SLOs - Systematic Methodology - The Department of Biology will assist in establishing a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with the enhancement student learning outcomes and will improve student learning as measured by these outcomes.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Using the list of Biology graduating students provided by the AA Research Analyst every semester, conduct assessment of student learning outcomes.</p> <p>Analyze results every semester and make changes/improvements to the curriculum, program, instruction, and/or</p>	<p>Assessment Method: Plans for improvement of curriculum, instruction, program, and/or faculty/instructors.</p> <p>Criterion for Success: 100% of students graduating as Biology majors will be assessed on a departmental assessment at the end of every semester.</p> <p>Improvement of 1% in the success rate of students as compared to the previous semester.</p>	<p>09/02/2008 - Retention rate values prove somewhat ambiguous in the Biology Department due to frequent transfers between degree plans for General Biology, Pre-dent and Pre-med. Despite the frequent migration of students between degree plans, the 2006 cohort of Biology majors during the last two years shows essentially the same retention rate (80.3 and 80.9%). The first-year retention rate of the 2007 cohort of General Biology majors is down drastically, however, to 51.2%. Conversely, the first year retention rate for the 2007 cohort in Pre-Dental Biology is up 10% compared to the 2006 cohort (62 vs. 54%, respectively). First year retention rate for the 2007 cohort in Pre-Med Biology is down 7% (66 vs. 73%) with respect to the 1st year 2006 cohort.</p> <p>Successes in three different gatekeeper courses vary considerably. Fail/drop rates for BIOL 1401 in AY05-06, AY06-07 and AY08 range from (on avg.) 60.5% to 48% to 54% (respectively). For BIOL 1402 from 47% to 46% to 47% (respectively). For BIOL 2403 from 52% to 43.5% to 46% (respectively). Improvement is observable in the latter course, while the former two demonstrate minimal change in drop out rates. In sum, this</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>faculty/instructors based on results.</p>		<p>results in an overall improvement. As to graduation rates, the Department of Biology has yet to receive the 4 and 6 year graduation from the OIRE. But data on success in gatekeeper courses during AY05-06, AY06-07 and AY07-08 demonstrate some improvement. For BIOL 1401, Fail/drop rates range (on avg. for Fall & Spring Semester) in the three consecutive academic years as follows: 61%, 48, 54; For BIOL 1402 as follows: 47%, 46%; 47%; For BIOL 2403 as follows: 52%, 43%, 40. The substantial decreases in fail/drop rates over three years in BIOL 1401 and 2403 will undoubtedly result in improved retention rates and 4-year graduation rates.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	
		<p>09/02/2008 - Student Learning Outcomes (SLOs) for several disciplines since Spring 2007 now have benchmarks and provide baseline values for annual comparisons. SLOs for Spring 2008 include, however, much larger sample of graduating participants, which therefore establishes improved baseline values that do not compare precisely with 2007 values. Nevertheless, 2008 graduates demonstrate an increase in passage rate (+5%) of the cell/molecular scores, a significant decrease in passage rates (-17%) in the field of genetics/evolution, and insignificant passage rate changes in the ecology/environment and physiology exit exams. The increased sample of 2008 should provide an improved comparison for SLOs in 2009.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>Dept - Biology - Degree Programs - Systematic Methodology - Establish a systematic methodology for collecting, reporting, and benchmarking of the key outcome measures associated with the continuance of students in degree programs.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: The Department of Biology will request from OIRE data on the 5 year performance measures at UTPA: a. 4 and 6 year graduation rates for each major and for the Department. b. retention rates in each major and for the majors at freshman, sophomore, junior and senior levels c. Years to graduation for our majors d. Success in gatekeeper courses offered in our department.</p>	<p>Assessment Method: Standard statistical analysis.</p> <p>Criterion for Success: Data collected.</p>		
<p>Dept - Biology - Access - Systematic Methodology - The Department of Biology will establish a systematic methodology for the collection, reporting, and benchmarking of the key outcome measures associated with increasing access to our educational programs and will improve access as measured by these outcomes.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date:</p>	<p>Assessment Method: Standard statistical methods.</p> <p>Criterion for Success: Annual increases in enrollment trends for Department of Biology course offerings.</p>	<p>09/02/2008 - Improvements in access in educational programs are reflected primarily in increased course enrollments in the Department of Biology. Fall 2008 enrollments in the department demonstrate an increase in undergraduate course enrollments by 5.4% and in graduate courses by 20%.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Work with OIRE to obtain data relating to class roll sizes and historical trends.</p> <p>What can you do to increase access to Biology majors? Recruitment?</p>			
<p>Dept - Biology - 1.D - Identify causes that prevent students from completing their educational goals in a timely fashion.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Cooperate with OIRE to obtain necessary data.</p>	<p>Assessment Method: Standard statistical analysis.</p> <p>Criterion for Success: Gather data on success rates and hours worked outside and high preparation.</p>	<p>09/02/2008 - The Department of Biology has acknowledge two primary factors that prevent students from completing educational goals: (1) non-academic work schedules and (2) poor academic preparation during during K-12 years. The Department has yet to implement a program to survey and quantify extent of extracurricular work schedules.</p> <p>Result Type: Criterion Not Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee.</p>
<p>Dept - Biology - Scholarly Productivity - Systematic Methodology - Establish systematic methodology for the collection, reporting, and benchmarking to improve the production and dissemination of scholarly and creative works as measured by key outcome measures.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies:</p>	<p>Assessment Method: Standard statistical analysis.</p> <p>Criterion for Success: Gather data on scholarly publications and creative works on an annual basis for comparative purposes.</p>	<p>09/02/2008 - Total publications have yet to be tallied for AY07-08. AY06-07 set a benchmark of 40 publications by 13 faculty members, up 5% from AY05-06 (38 publications). Total presentations of research at State, regional and National/International Conferences have yet to be tallied for AY07-08, down 5% from AY05-06). AY06-07 set a benchmark of 56 presentations by 17 faculty members. An update and comparison of last year's scientific and creative productions will be accomplished as soon as data are acquired. Several externally funded programs for undergraduate research were active during AY07-08, including the NSF-REU (Research Experience for Undergraduates) program, which supported six undergraduate student in research labs and</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
Extract data from Annual Evaluation folders.		<p>presentations in state, national, and international conferences. Seven Biology undergraduate researchers were supported in a similar program supported by HHMI (Howard Hughes Medical Institute), down one participant from AY06-07. Two graduate students in the UTMB (University of Texas Medical Branch) Bridge Program, under the supervision Biology professors, undertook research in preparation to join the Ph.D. Program at UTMB.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	
<p>Dept - Biology - Acquisition of External Funds - Systematic Methodology - Establish a systematic methodology for the collection, reporting, and benchmarking of key outcome measures for the acquisition of external funds and to improve the acquisition of external funds, as measured by these outcomes.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p>	<p>Assessment Method: Standard statistical methods.</p> <p>Criterion for Success: Gather data on acquisition of external funding and submitted grant proposals.</p>	<p>09/02/2008 - Total grants have yet to be tallied for AY07-08. AY06-07 set a benchmark of 38 active grants, totaling \$8,815,687 in external funding. This is a substantial increase from the previous year (AY05-06), during which 29 active grants amounting to \$4,576,537 were active.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee.</p>
<p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Extract data from Annual Evaluation folders.</p>			
<p>Dept - Biology - Credit and Non-credit Course Offerings - Systematic Methodology - Identify potential forums for interaction with community elements.</p> <p>Outcome Types: Administrative - Fiscal Year 2008</p>	<p>Assessment Method: Standard statistical methods.</p> <p>Criterion for Success: Listing of established and newly identified forums.</p>	<p>09/02/2008 - The Department of Biology maintains a central role in the HESTEC program during the Fall semester, with an active participation in poster presentation competition for undergraduate and graduate students. Two faculty members organize the activities of the entire department. Numerous extracurricular</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Survey faculty for new forums and identify existing forums for Annual Evaluation folders.</p>		<p>activities of faculty members that involve community activities, such as science fairs, scientific demonstrations, and lectures are shared during the course of each year. The Department is considering a system to enumerate these activities. Course offerings for academics and community members have increased by five, including Ethnobotany, Systematic Biology, Ethics in Biological Research, Developmental Mechanisms, and Molecular Evolution.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>consensus of the Department and Committee to improve stated goals.</p>
<p>Dept - Biology - Professional and Community Participation - Systematic Methodology - Identify potential resources for interaction with community elements.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Survey faculty for new resources and identify existing forums from Annual Evaluation folders.</p>	<p>Assessment Method: The Department will keep track of participation of faculty and student participation in professional and community based activities through the Merit and Tenure and Promotion documents</p> <p>Criterion for Success: A list of identified resources. Increase by one the number of co-sponsored events, (conferences, HESTEC, FESTIBA) with community organizations</p>		
<p>Dept - Biology - Qualified Applicants - Systematic Methodology - The Department of Biology will support the University to establish a systematic methodology for the collection, reporting, and benchmarking, and to improve the pool of qualified applicants as measured in the key outcome measures.</p>	<p>Assessment Method: Standard statistical analysis.</p> <p>Criterion for Success: A University systematic methodology for collection, reporting, and benchmarking will be successful.</p>	<p>09/02/2008 - The premier outreach program for UTPA high school applicants is the annual Fall HESTEC program. The Department of Biology maintains a central role in this week of activities by sponsoring scientific lectures, demonstrations, and posters based on the research of faculty, graduate and undergraduate students. High school participation in this program increases</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the</p>

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<p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Department will cooperate with both the University and College in these efforts.</p>		<p>steadily. Members of the Department of Biology are involved in a new high-school preparatory program called the 'UTPA/Hidalgo ISD Early College high School Project.' High school students (annual number of participants in Biology has yet to be determined for benchmark purposes) will be exposed to college-level curricula to interest them and prepare them for matriculation at UTPA. Progress has been made to initiate this program in the upcoming year.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p> <hr/> <p>09/02/2008 - The Department of Biology maintains a central role in the HESTEC program during the Fall semester, with an active participation in poster presentation competition for undergraduate and graduate students. Two faculty members organize the activities of the entire department. Numerous extracurricular activities of faculty members that involve community activities, such as science fairs, scientific demonstrations, and lectures are shared during the course of each year. The Department is considering a system to enumerate these activities. Course offerings for academics and community members have increased by five, including Ethnobotany, Systematic Biology, Ethics in Biological Research, Developmental Mechanisms, and Molecular Evolution.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>Committee to improve stated goals.</p> <hr/> <p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>
<p>Dept - Biology - Access to Inter-American and Global Perspectives - Systematic Methodology - Sustain and foment existing</p>	<p>Assessment Method: Standard statistical methods.</p>	<p>09/02/2008 - The Department of Biology has increased its members on the Advisory Committee</p>	<p>09/29/2008 - Assessment results will be transmitted to, and</p>

Intended Outcomes	Means of Assessment & Criteria for Success / Tasks	AES Assessment Results	Use of Result & Follow-Up
<p>diversity. The Department will engage in activities that provide opportunities for faculty and students to gain international experience</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Poll faculty and obtain data from Annual Evaluation folders. The Department will facilitate faculty and student engagement in activities that include international experiences</p>	<p>The Department will keep track of faculty and student engagement in activities that include international experiences based activities through the Merit and Tenure and Promotion documents</p> <p>Criterion for Success: Make a categorized list of international affiliations, backgrounds, and activities, including participation in International Week, Pan Am Days, study abroad opportunities, international publications, and such.</p> <p>a. Collect data to benchmark the number of active partnerships that yield instructional, research, or service benefits to the institution and its faculty b. Number of international internships. c. Number of faculty with international experiences through Fulbright and similar faculty experiences d. Number of International presentations</p>	<p>for the Office of International Programs from one to two. Both members were actively involved in the International Week and Pan Am Days during AY06-07 and AY07-08. During AY07-08 the International Week theme was 'Earth Matters,' and therefore required increased activities on part of the Department of Biology. Six Certificates of Appreciation were earned by the department on account of their presentations in exhibitions, lectures, and panel discussions. Two newly hired faculty members, with active international research programs in Mexico and Southeast Asia, one of which is a Mexican national, have increased the activities of graduate and undergraduate students in foreign countries.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>
<p>Dept - Biology - Optimization of Course Offerings - Systematic Methodology - The Department of Biology will examine recent trends on course scheduling. The Department will establish a systematic methodology for the collection of, reporting of, and benchmarking of assessment data for optimizing course offerings and will improve the optimization of course offerings as measured by these outcomes.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date:</p>	<p>Assessment Method: Standard statistical analysis</p> <p>Criterion for Success: A list of class conflicts and graphical and tabular data outputs.</p> <p>Maximize faculty, classroom and lab use.</p>	<p>09/02/2008 - The Department Chair, with support of the Graduate Committee Chair, established a new system to coordinate the growing enrollments (graduate and undergraduate) and course offerings (graduate and undergraduate) in Biology. Class schedule conflicts have been reduced while use of classroom space has become more efficient.</p> <p>Result Type: Criterion Met</p> <p>Next Step: Continue Current Strategy(s)</p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>

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<p>06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Cooperate with Registrar's Office and R-25 to obtain basic data.</p>			
<p>Dept - Biology - Recruiting Qualified Faculty - Systematic Methodology - The faculty will establish a systematic methodology for the collection of, reporting of, and benchmarking of outcome measures relating to the recruitment and retention of faculty.</p> <p>Outcome Types: Administrative - Fiscal Year 2008 Administrative - Fiscal Years 2009 - 2011</p> <p>Start Date: 06/01/2007</p> <p>Outcome Status: Active/Ongoing</p> <p>Strategies: Cooperate with Department Search Committee to obtain data and survey current faculty for perceived problems.</p>	<p>Assessment Method: Standard statistical analysis.</p> <p>Criterion for Success: Tabular data of recruited and retained faculty.</p>	<p>08/29/2008 - While the Department of Biology has lost three faculty members (two full professors and one lecturer) through retirement, one Assistant Professor was lost due to a job transfer. Two new professors were hired during AY06-07, AY07-08, and AY08-09. Recruitments to fill 8 positions over the course of three years has met with a 75% success rate.</p> <p>Result Type: Criterion Met</p> <p>Next Step: <u>Continue Current Strategy(s)</u></p>	<p>09/29/2008 - Assessment results will be transmitted to, and reviewed by, the Department of Biology Strategic Planning/Program Committee and Chair. Assessments and appropriate modifications to the action plan will be made by consensus of the Department and Committee to</p>