

Administrative and Educational Support Report*

Department of Chemistry

**Annual Action Plan
Annual Assessment Report**

June 2006 – May 2007

***Student Learning Outcomes for this department are available at
<http://ie.panam.edu/CoSELearningOutcomes.htm>**



Annual Action Plan: June 1, 2006–May 31, 2007

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: Academic Affairs

Unit Head: Dr. Hassan Ahmad

Unit Mission: The Department of Chemistry is committed to the mission of providing quality education in the process of preparing students for graduate work or careers in chemistry and the biomedical sciences. The department strives to fulfill its mission by offering a program that leads to an undergraduate, graduate, major or minor in chemistry. In addition, the department prepares students for admission to schools of dentistry, pharmacy, and medicine. The department also offers a program that leads to teacher certification. The chemical curriculum is designed to introduce students to the fundamental fields of chemistry and provides opportunities for chemical research. The department is committed to engaging in its activities of teaching, research and professional service in an environment of academic freedom. The Department of Chemistry at The University of Texas – Pan American provides an excellent program and helps the university fulfill its responsibility of providing high quality academic programs for the people of this region and the State of Texas.

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

Academic Affairs Objective: Review and restructure all educational programs to ensure that students complete their educational goals in a timely fashion.

College/AVP Objective: Give students and design programs with more flexibility to meet core requirements, and reduce time to graduation.

Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
Time-to-graduation student success. (1)	<ul style="list-style-type: none"> A departmental committee will be set up 	Chemistry department will develop a plan for	The committee will make the recommendation to the	None

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Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
	<p>in fall-06 to assess and develop a non-ACS certified BS degree program in Chemistry.</p> <ul style="list-style-type: none"> The department will seek the administrative approval of the new degree plan for implementation 	<p>improving time-to-graduation for its BS degreed programs by developing a plan to offer a non-American Chemical Society (ACS) certified BS degree in chemistry (120-124 semester credit hours) by the end of Ay 06-07.</p>	<p>department chair who will communicate with the administration to seek approval of a new less-rigorous degree plans by the end of June 2007.</p>	
	<ul style="list-style-type: none"> A committee will be established to work on a new course schedule. 	<p>The committee will:</p> <ul style="list-style-type: none"> Develop a plan that offers flexibility of course offerings in the afternoon and evening to accommodate working students. Evaluate the feasibility of offering the general chemistry course on Saturdays. Evaluate the possibility of offering high demand courses online. 	<p>The committee will recommend a new course schedule to the department chair by May 2007.</p>	<p>None</p>

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Academic Affairs Objective: Ensure that graduate programs are academically rigorous and research centered, promoting independent learning and preparing graduates to contribute successfully to their chosen professions.

College/AVP Objective: Infuse hands-on, field-base, and research experiences/opportunities into COSE curriculum. Graduate & Undergraduate Program.

Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
Continue to develop the new Chemistry MS Program. (2)	The departmental graduate committee will review the future course offerings to facilitate the smooth implementation of the MS program.	<p>The three-year graduate course rotation and offering plan will be updated/modified to ensure that:</p> <ul style="list-style-type: none"> • required courses are offered regularly, and • course assignments are given to instructors at least one semester in advance. <p>The department will host a Graduate Program Open-House at UTPA to promote the new graduate program and recruit the new majors.</p>	<p>The departmental graduate committee review will be completed by April 31, 2007 including:</p> <ul style="list-style-type: none"> • a schedule of required courses offered on a regular schedule, and • a schedule of instructors for courses. This schedule will be communicated to instructors prior to June 2007. <p>A successful open-house will be hosted by the end of April 2007.</p>	<ul style="list-style-type: none"> • \$1000 to promote and host the open house.
	The departmental graduate committee will propose and develop new courses that will address the needs of	Propose and develop at least fifty percent (50%) of the recommended new courses-	New courses will be submitted to the Graduate Counsel by the end of AY 06-07.	None

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Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
	high school teachers enrolled in the program.			
	Recruit new faculty for maters program.	Fill the new Chemical Education faculty position.	Fill the new Chemical Education faculty position by May 2007.	

UTPA Goal:

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

Academic Affairs Objective:

Promote faculty and staff engagement in identifying and developing partnerships with external constituencies.

College/AVP Objective:

Create partnerships with local businesses and organizations to serve needs of the community.

Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
Create partnerships with local businesses and organizations to serve needs of the community. (3)	Establish a Chemistry Advisory Council.	Establish the membership, bylaws, and objectives of the Chemistry Advisory Council.	Invitations will be sent out to the potential members of the Advisory Council by the end of May 2007. The bylaws and objectives of the Advisory Council will be established by the end of May 2007.	None

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Academic Affairs

Promote engagement with existing organizations to address challenges and opportunities.

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Objective:

College/AVP Objective: Find niches in the community where COSE expertise can help.

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Find niches in the community where Chemistry expertise can help. (4)	<p>Present research findings in the community on topics related to chemistry and chemical education.</p> <p>Facilitate efforts of chemistry faculty to help local students with science projects and serve as judges in science fairs.</p>	<p>At least one chemistry faculty member will participate in a community presentation related to chemistry.</p> <p>At least two chemistry faculty members will serve as judges in the science fair competition.</p>	Faculty participation in community presentations and science fairs will be documented by the end of Aug 2007.	None

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

Academic Affairs Objective: Collaborate with P-12 institutions, STC and UTPA on curriculum alignment

College/AVP Objective: Work with school district administrative leaders to ensure an integrated curriculum.

Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
Work with school district administrative leaders to ensure an integrated Chemistry curriculum. (5)	<ul style="list-style-type: none"> • Encourage faculty to sit on curriculum committees / advisory groups at high schools. 	A formal partnership, including a memorandum of understanding or similar document, with at least one school district will be	A partnership with at least one school district will be formalized established by the end of Aug 2007.	None

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Unit Objective	Strategy(ies) to Achieve Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	New Resources Needed in FY07
	<ul style="list-style-type: none">• Create high school and Chemistry faculty relationships/ partnerships with small schools districts, i.e., mentoring programs	established.		



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Unit: **Department of Chemistry**

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Time-to-graduation student success. (1)	Chemistry department will develop a plan for improving time-to-graduation for its BS degreed programs by developing a plan to offer a non-American Chemical Society (ACS) certified BS degree in chemistry (120-124 semester credit hours) by the end of Ay 06-07.	The committee will make the recommendation to the department chair who will communicate with the administration to seek approval of a new less-rigorous degree plans by the end of June 2007.	Due to uncertainty by the university curriculum committee on the decision of the core courses this plan was tabled until new core is approved.	N/A
	<p>The committee will:</p> <ul style="list-style-type: none"> • Develop a plan that offers flexibility of course offerings in the afternoon and evening to accommodate working students. • Evaluate the feasibility of offering the general chemistry course on Saturdays. • Evaluate the possibility of offering high demand courses online. 	The committee will recommend a new course schedule to the department chair by May 2007.	New scheduled of course offerings was recommended to the Dean in fall 2007.	As a result of departmental committee discussion a greater distribution of courses in afternoon and are scheduled for the spring-08 semester.

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Continue to develop the new Chemistry MS Program. (2)	The three-year graduate course rotation and offering plan will be updated/modified to ensure that: <ul style="list-style-type: none"> • required courses are offered regularly, and • course assignments are given to instructors at least one semester in advance. 	The departmental graduate committee review will be completed by April 31, 2007 including: <ul style="list-style-type: none"> • a schedule of required courses offered on a regular schedule, and • a schedule of instructors for courses. This schedule will be communicated to instructors prior to June 2007. 	Plan developed	Document available	
	The department will host a Graduate Program Open-House at UTPA to promote the new graduate program and recruit the new majors.	A successful open-house will be hosted by the end of April 2007.	Instead of open house the hard copies of the program availability was distributed	Courses for Spring 07 scheduled	More than 130 letter were mailed out to RGV local high school and middle school teachers
	Propose and develop at least fifty percent (50%) of the recommended new courses	New courses will be submitted to the Graduate Counsel by the end of AY 06-07.	Not achieved	N/A	

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	Fill the new Chemical Education faculty position.	Fill the new Chemical Education faculty position by May 2007.	Committee recommended a candidate for the position.	New chemical education faculty, Dr. Kenneth Smith of Purdue University was hired

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Unit Objective	Measurable Outcome for Unit Objective	Assessment Criteria, Evaluation Methods for Measurable Outcome	Assessment Results (Use actual data to describe annual performance)	Use of Results (What change was made?)
Create partnerships with local businesses and organizations to serve needs of the community. (3)	Establish the membership, bylaws, and objectives of the Chemistry Advisory Council.	<p>Invitations will be sent out to the potential members of the Advisory Council by the end of May 2007.</p> <p>The bylaws and objectives of the Advisory Council will be established by the end of May 2007.</p>	<p>Some possible members are identified</p> <p>The draft of the By Laws written.</p>	<p>Invitation letters not sent out. This goal will be completed in year 07-08</p> <p>Document available on file</p>

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Find niches in the community where Chemistry expertise can help. (4)	At least one chemistry faculty member will participate in a community presentation related to chemistry. At least two chemistry faculty members will serve as judges in the science fair competition.	Faculty participation in community presentations and science fairs will be documented by the end of Aug 2007.	At least three faculty members attended the two school fairs and judged the presentations by students.	Letters from schools are on file.

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Work with school district administrative leaders to ensure an integrated Chemistry curriculum. (5)	A formal partnership, including a memorandum of understanding or similar document, with at least one school district will be established.	A partnership with at least one school district will be formalized established by the end of Aug 2007.	The department has approached three school districts and established initial partnerships.	The department will help develop Hidalgo high schools chemistry curriculum. Also the department will help train the teachers of Weslaco Advanced Placement Program at UTPA via the HHMI grant. Students from South Texas ISD participated in the summer program with chemistry faculty members to conduct summer research. Students will present their posters at HESTECH science symposium in Sept-07.