

Online Assessment Tracking Database

Sam Houston State University (SHSU)
2014 - 2015

Chemistry, Department Of

Goal**Procure Appropriate Resources To Facilitate The Academic Mission Of The Department 🔑**

The department will monitor the classroom, laboratory, research, and out-reach (service) needs of the unit. Budget requests will reflect these needs.

Objective (P)**Recruitment Of Graduate Assistants 🔑**

The department diligently recruits graduate assistants in an effort to reduce the number of undergraduates teaching laboratory sections.

KPI**Performance Indicator****Number Of Graduate Assistants 🔑**

In an effort to lower the number of undergraduate assistants in the lab, there is a need for an increase in graduate assistants.

Result**Increase In Number Of Graduate Assistants 🔑 📄**









In the Fall 2014 semester, there were 23 graduate assistants (Md Nure Alam, Udana Ariyaratne, Matthew Danker, Xinmei Dong, Sobiya George, Sajini Hettiarachchi, Md Sarowar Hossain, Harshani Jayabahu, Nilan Kamethewatta, Manpinder Kaur, Chathuri Kombala Nanayakkara, Sanjaya Lokugama Widanelage, Nicholas Pandorf, Chamila Priyardashani, Nuwan Punchi Naide Acharige, Nuwan Rammawadu, Harshani Rathnaweera, Thiwanka Ratnayake, Reny Jacob Roy, Hemantha Siyambalagoda, Victoria Spenn, Prajwol Tuladhar, Shadi Yavari). There were 21 graduate assistants (Md Nure Alam, Udana Ariyaratne, Matthew Danker, Xinmei Dong, Sobiya George, Sajini Hettiarachchi, Md Sarowar Hossain, Harshani Jayabahu, Manpinder Kaur, Chathuri Kombala Nanayakkara, Sanjaya Lokugama Widanelage, Nicholas Pandorf, Chamila Priyardashani, Nuwan Punchi Naide Acharige, Harshani Rathnaweera, Thiwanka Ratnayake, Reny Jacob Roy, Hemantha Siyambalagoda, Victoria Spenn, Prajwol Tuladhar, Shadi Yavari) during the spring 2015 semester. Nilan Kamethewatta and Nuwan Rammawadu graduated at the end of the fall semester. Compared to last fall, this was a gain of 6 graduate students and compared to last spring, this was a gain of 3 graduate students. This increase over previous years needs to be maintained.

Action**Make Offers To New Students 🔑**









Ten of our graduate students completed their degrees this past year (2 in the fall semester and 8 during the summer). We have made a few offers of admission, but are being restricted in the number of offers we can make. Further, some of the offers have been rejected. We hope to have 5 to 7 new students in the fall which will mean that our total number of students will drop.

Goal**Provide Appropriate Personnel Resources For The Unit 🔑**

The department will assess the personnel (staff and faculty) needs of the unit on an annual basis. Annual funding requests will reflect these needs and hiring decisions will be based on these needs. The department office will provide appropriate resources and encourage faculty and staff to participate in development opportunities.

Objective (P)	Request Additional Faculty Lines 
	<p>The department is still in need of additional faculty lines to meet the demands for upper level and core courses. A request will be submitted through the PBR process for new lines.</p>
KPI Performance Indicator	New Faculty Line(s)  <p>While we requested new positions last year, none were forthcoming. The need still exists, so new faculty lines will be sought even in economically bleak times.</p>
Result	No New Positions  <p>Not only were we not given a position to fill this year but Ozcan Gulacar decided to move to California for personal reasons and Paul Loeffler decided to retire effective at the end of the summer term.</p>
Action	Visiting Professor Hired  <p>We have hired Dr. Julio Valladares for the coming year. This will help a bit with our increased load. The gains that we had made in appropriate student/faculty ratio in general chemistry have been lost. We will search for two tenure-track positions in the coming year.</p>
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Goal	Mentor Graduate Students In Research Publications  <p>Faculty researchers will mentor graduate students in research publications.</p>
Objective (P)	Graduate Students Will Demonstrate Skills In Publishing Research  <p>During the master's program, graduate students will demonstrate the research skills to publish their research findings.</p>
KPI Performance Indicator	Research Publications  <p>The number of research publications with graduate student authors or co-authors will indicate departmental success in preparing students to report research findings in written form. We expect that all graduate students who complete their M.S. degrees will have one or more publications, and most will have more than one presentation.</p>
Result	Graduate Research Publications  <p>In this cycle, there were three peer-reviewed publications and one graduate student co-author. As</p>

always it is appropriate to remind the reader that publication often lags behind student completion. The number of presentations with graduate co-authors is much larger (13 graduate students on 20 presentations).

Action	Research Communication  We will evaluate and direct our graduate students' progress in communicating their research results both at scientific meetings and in the peer-reviewed literature during 2015-2016.
Goal	Encourage Graduate Student Presentations At Professional Meetings  Mentoring graduate students in professional conference presentations is the goal.
Objective (P)	Graduate Students Will Demonstrate Skills In Conference Presentations Of Research  During the master's program, graduate students will demonstrate the presentation skills to present their research findings at professional conferences.
KPI Performance Indicator	Student Presentations  The number of presentations by graduate students at professional meetings will indicate the success of the department in preparing students to orally present their research results. We expect that every graduate student who completes their M.S. degree will have one or more publication, and most will have more than one presentation.
Result	Graduate Research Presentations  The number of presentations with graduate co-authors was 14.
Action	Research Presentations  We will evaluate and direct our graduate students' progress in communicating their research results both at scientific meetings and in the peer-reviewed literature during 2015-2016.
Goal	Chemistry-Related Careers Or Advanced Graduate Studies  The success of any program is whether its graduates find related work or pursue further graduate education.
Objective (P)	After Degree Placement  Upon completion of the BS or MS program graduates will either find a chemistry-related job upon graduation (such as working in a research or analytical lab) or will go for graduate or advanced graduate studies.

**KPI
Performance
Indicator****Job Or Advanced Program Placement 🔑**

The indicator will be the proportion of our graduating MS students who either find a chemistry-related job or go for advanced graduate studies.

Result**Successful Graduate Placement 🔑**

Ten students completed their M.S. degrees this year. Eight of these are going on to Ph.D. programs (at the University of Kansas, the University of Miami, the University of Georgia, Oregon State University, two at Wayne State University and two at the University of Arizona) and two have jobs in government/industry.

**KPI
Performance
Indicator****Job Or Graduate Program Place For BS Graduates 🔑**

The indicator will be the proportion of our graduating BS students who either find a chemistry-related job or go for graduate studies.

Result**Undergraduate Placement 🔑**

This past academic year, 12 students graduated with chemistry majors and 16 students graduated with forensic chemistry majors. Of the 12, 7 are continuing their education, 1 is actively looking for a job and we don't have any information on 4 of them. Of the 16, 4 are continuing their education, 2 are employed in chemically related jobs, 2 are actively looking for jobs, and we don't have any information on 8 of them.

Action**Follow Former Students 🔑**

We will continue to follow our former students as they seek employment and admission to graduate programs. This is a continuous process.

Previous Cycle's "Plan for Continuous Improvement"

In general, the situations that we are faced with continue. The challenges continue to be challenges, and we try to address them in the best way that we can.

We will continue to make offers of admission and assistantship to qualified applicants to our graduate program. We will work with the College of Sciences Dean's Office to better market the offer. We discovered over the summer of 2014 that the cost of health insurance (which is required of international graduate students) increased substantially (from \$993 to \$1453) which effectively lowers the value of our graduate assistantship. This emphasizes the need to better market the offer especially if the amount of the offer does not increase.

We will continue to make the case that additional faculty lines are needed. For the fall term 2014 we needed to hire a pool faculty member to cover all of our classes, and were only able to do so at the last minute.

We will continue to encourage our graduate students to present their research results in appropriate venues.

We will continue to follow our former students as they grow professionally and we will keep track of our newest graduates as they move on.

We will offer CHEM 3438 again next summer and we will make sure that the appropriate advisors are aware of this offering.

Please detail the elements of your previous "Plan for Continuous Improvement" that were implemented. If elements were not implemented please explain why, along with any contextual challenges you may have faced that prevented their implementation.

We have not so far been able to improve the marketing of the graduate offer.

While we continue to make the case for more positions, we are losing ground. Paul Loeffler retired and Ozcan Gulacar quit for personal reasons. Thus we have lost 2 people and we hired 1 visiting professor. The gains that we had made in appropriate student to faculty ratios have been lost.

We have encouraged our graduate students to present their research results in appropriate venues, and we continue to follow the growth of our former students.

We offered CHEM 3438 in the summer and 11 students enrolled.

Plan for Continuous Improvement - Please detail your plan for improvement that you have developed based on what you learned from your 2014 - 2015 Cycle Findings.

Once again, the situations that we are faced with continue. The challenges continue to be challenges (and we have lost ground), and we try to address them in the best way that we can.

Since we were restricted in the number of graduate assistant positions that we could offer, we need to be able to market the offers more favorably. Hopefully the new graduate coordinator can work with the College of Sciences Dean's Office to make this happen.

We will search for two positions in the coming year--to replace Paul Loeffler and Ozcan Gulacar, and we will continue to make the case that additional faculty lines are needed. For the Fall 2015 term, nearly every single class was full to capacity just prior to the first payment deadline. More students wanted to add our courses.

We will continue to encourage our graduate students to present their research results in appropriate venues.

We will continue to follow our former students as they grow professionally and we will keep track of our newest graduates as they move on.

We will offer CHEM 3438 again next summer and we will make sure that the appropriate advisors are aware of this offering.

Lastly, we recently found out that some of our laboratory sections exceed the requirements of the American Chemical Society--they are too large. We will adjust the size so none of the labs exceed 24 students. This will have the greatest impact on CHEM 1406 (our first semester course for non-majors) and on CHEM 1411 (general chemistry I).
