## LAS UNDERGRADUATE ASSESMENT AND PROGRAM REVIEW

## **Department of Chemistry**

Academic Year 2009

Department of Cher	nistry						Academic Year 2009
Goal of Objective	How Monitored American Chemical Society examination given at end of semester. ACS First Term General Chemistry <u>2005</u> examination. NEW	Performance on nationally normed exam.		<b>Observations of Student Performance</b> <b>Fall 2008</b> : Out of 303 students 55% scored in range of ± 10 of the national norm; 13% above and 32% below. <b>Spring 2009</b> : Out of 220 students, 54.5% in range; 11% above; 34.5% below. <b>Summer 2009</b> : Out of 44 students, 68% in range; 14% above; 18% below.	When and By Whom Were Results Analyzed? Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	2009: Below. Summer 2009:	Dept. or Program Follow-up Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 212- General</u> <u>Chemistry II.</u> Students will know principles and applications of second semester general chemistry.		on nationally normed exam.	Students should fall in the $\pm$ 10 range of the national norm, or above.	<b>Fall 2008</b> : Out of 86 students 63% scored in range of $\pm$ 10 of the national norm; 6% above and 31% below. <b>Spring 2009</b> : Out of 126 students, 62% in range; 21% above; 17% below. <b>Summer 2009</b> : Out of 27 students, 56% in range; 33% above; 11% below.	2008-2009	Fall 2008: Below. Spring 2009: Satisfactory. Summer 2009: Satisfactory.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 523 -</u> <u>Analytical</u> <u>Chemistry.</u> Students will know principles and applications of analytical chemistry.		on nationally normed exam.	Students should fall in the $\pm$ 10 range of the national norm, or above.	<b>Fall 2009</b> : Out of 22 students 95% scored in range of ± 10 of the national norm; 0% above and 5% below.	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	Satisfactory.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 524-</u> <u>Instrumental</u> <u>Methods of</u> <u>Chemical Analysis.</u> Students will know principles and applications of instrumental chemistry.		on nationally normed exam.		<b>Spring 2009</b> : Out of 16 students 75% scored in range of ± 10 of the national norm; 0% above and 25% below.	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	Below.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.

## LAS UNDERGRADUATE ASSESMENT AND PROGRAM REVIEW

## **Department of Chemistry**

Academi	: Year	2009
---------	--------	------

Department of Cher	nistry						Academic Year 2009
Program-initiated Goal of Objective CHEM 532 - Organic Chemistry II. Students will know principles and applications of organic chemistry.	Where, When, and How Monitored American Chemical Society examination given at end of semester. ACS Organic Chemistry 2004 examination.	normed exam.	Students should fall in the ± 10 range of the	<b>Observations of Student Performance</b> <b>Fall 2008</b> : Out of 58 students 48.3% scored in range of ± 10 of the national norm; 10.3% above and 41.4% below. <b>Spring 2009</b> : Out of 35 students, 60% in range; 14% above; 26% below. <b>Summer 2009</b> : Out of 39 students 59% scored in range of ± 10 of the national norm; 8% above and 33% below.	When and By Whom Were Results Analyzed? Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	2009: Below. Summer 2009:	Dept. or Program Follow-up Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
CHEM 546 - Physical Chemistry I. Students will know principles and applications of physical chemistry.	American Chemical Society examination given at end of semester. ACS Physical Chemistry (Quantum) Form 2006.	on nationally	Students should fall in the $\pm$ 10 range of the national norm, or above.	<b>Fall 2008</b> : Out of 11 students 64% were in range of ± 10 of the national norm; 0% above and 36% below.	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09	Below.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 548 -</u> <u>Physical Chemistry</u> <u>II.</u> Students will know principles and applications of physical chemistry.	American Chemical Society examination given at end of semester. ACS Physical Chemistry (Thermodynamics) Form2006.	normed exam.		<b>Spring 2009</b> : Out of 13 students 69% scored in range of ± 10 of the national norm; 23% above and 8% below.	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	Satisfactory.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 615-</u> <u>Advanced Inorganic</u> <u>Chemistry.</u> Students will know principles and applications of inorganic chemistry.	American Chemical Society examination given at end of semester. ACS Inorganic Chemistry 2002 examination.	on nationally		<b>Spring 2009</b> : Out of 9 students 78% scored in range of ± 10 of the national norm; 11% above and 11% below.	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	Satisfactory.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.
<u>CHEM 663-</u> <u>Biochemistry II</u> . Students will know principles and applications of biochemistry (2 indepth semesters).	American Chemical Society examination given at end of semester. ACS Biochemistry 2006 examination. <u>No</u> <u>national norms</u> .	on nationally normed exam.		<b>Spring 2009</b> : Out of 19 students 74% scored in range of ± 10 of the average; 10% above and 16% below. <u>Used "old" national norm of 35.39</u> .	Dr. Rillema analyzed all scores for the 2008-2009 academic year 8/31/09.	Satisfactory.	Information will be shared annually with the appropriate subdivision. Monitor exam results annually.