**IMPERIAL VALLEY COLLEGE**

**Student Learning Outcomes (SLO) Assessment Cycle Form**

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| Date: | Feb 27 2012—for Fall 2011 |  |  |
| Department Name: | Science Math Engineering |  |  |

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| Course Number/Title or Program Title: | Chemistry 202/General Inorganic Chemistry II |

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| Contact Person/Others Involved in Process: | Lead: James Fisher Others: |

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| If course is part of a major(s), and/or certificate program(s), please list all below: | |  |  |  |  | |
| Major(s): | Certificate(s): | | | | |  | |  |  |  |  |
| **COMPUTER SCIENCE**  **GENERAL SCIENCE**  **LIFE SCIENCE**  **PHYSICAL SCIENCE**  **PRE-ENGINEERING**  **UNIVERSITY STUDIES** |  | | | | |  | |  |  |  |  |

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| Does course satisfy a community college GE requirement(s)? | X | Yes |  | No |  | N/A |

If yes, check which requirement(s) below:

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|  | | | American Institutions |  | Language and Rationality – English Composition | | | | |
|  | | | Health Education |  | Language and Rationality – Communication and Analytical Thinking | | | | |
|  | | | Physical Education / Activity | X | Natural Science | | | | |
|  | | | Math Competency |  | Humanities | | | | |
|  | | | Reading Competency |  | Social and Behavioral Sciences | | | | |
|  |  | | | |  | |  |
|  | **Student Learning Outcome** | | | | | **Assessment Tool** | **Institutional Outcome** | | |
| Students examine and develop concepts of covalent bonding, orbital hybridization and molecular orbital theory. | | | | | | Laboratory Exam 3 | ISLO4 | | |
| Students identify and perform organic addition and elimination reactions. | | | | | | Laboratory Exam 3 | ISLO2 | | |
| Students compare and analyze Thermodynamics properties and differentiate between spontaneity and maximum useful work heat and Free energy | | | | | | Laboratory Exam 3 | ISLO2 | | |
| Students develop ideas of Chemical Kinetics from experiments using concentration dependence then determining rates and rate law | | | | | | Laboratory Exam 3 | ISLO4 | | |
| Students recognize oxidation-reduction reactions in electrolytic cells, sacrificial anodes, the use of the Nernst equation, and how to balancing red-ox reactions | | | | | | Laboratory Exam 3 | ISLO2 | | |

**Each SLO should describe the knowledge, skills, and/or abilities students will have after successful**

**completion of course or as a result of participation in activity/program.** A minimum of one SLO is required

per course/program. You may identify more than one SLO, but please note that you will need to collect and

evaluate data for each SLO that you list above. Attach separate pages if needed. *For assistance contact: Toni Pfister* [*toni.pfister@imperial.edu*](mailto:toni.pfister@imperial.edu) *or X6546*

**\*Institutional Student Learning Outcomes: ISLO1** = communication skills; I**SLO2** = critical thinking skills;

**ISLO3** = personal responsibility; I**SLO4** = information literacy; I**SLO5** = global awareness

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| **1. Course Number & Date of Assessment Cycle Completion** | **Course:** Chemistry 202 **Date:** Fall 2011 |
| **2. People involved in summarizing and evaluating data** | 15 |
| **3. Data Results**  Briefly summarize the results of the data you collected. | E1 Q3 Hess's thermo Spring 2011: 83.01%, Fall 2011: 98.15%  Students compare and analyze Thermodynamics properties and differentiate between spontaneity and maximum useful work heat and Free energy  Laboratory Exam 3  ISLO2  The present correct for students answering that question are above. A two semester overview is not enough information to draw a conclusion on. |
| **4. Course / Program Improvement**  Please describe what change(s) you plan to implement based on the above results. | This question has changed on the lab exam. The problem on the exam is worded better and a better representation of what they did in lab. |
| **5. Next Year** Was the process effective? Will you change the outcome/ assessment for next year? (e.g., alter the SLO, assessment, faculty discussion process, strategy for providing SLO to student)? If so, how? | I’m happy with the question, I’m happy with the lab, and with the lab exam style of SLO. |
| **6. After-Thoughts** Feel free to celebrate, vent, or otherwise discuss the process. | Nothing right now. |