Student Learning Outcomes (SLOs) for Instruction Programs Phase I

Program Outcomes Assessment Report

"Program/Degree/Certificate Description or Mission Statement & Identification of Outcome(s)"

Date: **10/11/11**

Degree or Certificate Grid needs to also be submitted (blank Grid on final page – see SLO Coordinator for assistance. The SLO Coordinator can make a grid for your specific degree/certificate program – just contact her.

Has SLO Grid been completed? Yes_X_____No_____ Is it Attached? Yes____X____No_____

Please write a couple of sentences describing what information the completed Grid provides. You may want to comment on ISLOs which are being covered well or not covered at all, changes to be made to outcomes or assessments, or, if possible, you may want to compare Grid to previous years.:

The matrix includes 22 courses. The average ISLO ratings are: Critical Thinking (3.5), Communication (2.5), Personal Responsibility (2.5), Information Literacy (2.5), and Global Awareness (2.2). These data suggest that the most important focus of the degree is critical thinking and that the other program outcomes are deemed slightly less important.

Please include the outcomes that have been designed for your courses.

Course Number	Outcomes
ANTH 100	1) Define the main goals and aims physical anthropology. 2) Demonstrate a measurable understanding of the Theory of Evolution by Natural Selection. 3) Illustrate a measurable understanding of Mendelian Inheritance Rules and biological variation based on the study of modern genetics. 4) Recognize anatomical changes in the evolutionary history of humankind based on the fossil record. 5) Explain biological and cultural diversity.
BIOL 120	1) Display oral communication

	3) Display ability to understand written and illustrated information on subject matter. 4) Display an understanding of global impact on and by **vertebrate** animals.
BIOL 140	1) Identify an important issue in botany, conduct research via literature, interviews with experts and hands-on projects, and clearly communicate content learned about the project by writing a research paper. 2) Identify an important issue in botany, conduct research via literature, interviews with experts and hands-on projects, and document the information sources utilized by citing references within a research paper and at the end, using a standard documentation style (e.g. MLA style). 3) Use systems thinking to explain how a selected topic in botany interconnects with global botanical communities, ecosystems

	2) Display knowledge of anatomy and dissection competency using cat specimens as subjects. 3) Display critical thought related to topics in human anatomy as it applies to a global perspective. 4) Demonstrate competency in communicating information related to the anatomy of the heart.
BIOL 206	1) Describe the physiology associated with a current global human health issue. 2) Demonstrate an understanding of the physiology related to an electroencephalogram. 3) Display critical thought associated with the physiology of functioning skeletal muscles during an exercise in personal responsibility. 4) Display critical thought related to an aspect of human physiology presented during a clinical situation.

	5) Students demonstrate knowledge of atomic structure and quantum mechanics and apply these concepts to the study of periodic properties of the elements.
CHEM 202	1) Students examine and develop concepts of covalent bonding, orbital hybridization and molecular orbital theory. 2) Students identify and perform organic addition and elimination reactions. 3) Students compare and analyze Thermodynamics properties and differentiate between spontaneity and maximum useful work heat and Free energy. 4) Students develop ideas of Chemical Kinetics from experiments using concentration dependence then determining rates and rate law. 5) Students recognizm

Outcome #2:

Students will display competency with respect to the use of standard laboratory equipment and techniques commonly used in life science labs.

Est. Completion Date: completion of next Comprehensive Program Review (2013)

Way(s) to assess: exams, lab practicals, and/or laboratory exercises

Outcome #3:

Students will understand the process of scientific research and display critical thinking skills related to hypothesis development, experimentation and data interpretation.

Est. Completion Date: completion of next Comprehensive Program Review (2013)

Way(s) to assess: exams, lab practicals, laboratory exercises, class presentations, and/or assignments

Outcome #4:

Students should develop a foundation in biology strong enough to allow the successful completion of any attempted 200-level biology course(s).

Est. Completion Date: completion of next Comprehensive Program Review (2013)

Way(s) to assess: Comparison of class averages of those students who completed the BIOL 180-182 sequence prior to taking 200-level courses with the class averages of those students who only completed BIOL 100 before taking 200-level courses.

Program Outcomes and Course Alignment Matrix for Imperial Valley College

Program: Life Science Associates Degree Completed on: 10/13/10

Prepared by : Daniel Gilison

Course	Communication	Critical Thinking	Personal Responsibility	Information Literacy	Global Awareness
18 units from					
ANTH 100	3	3	4	2	4
BIOL 120	3	2	2	3	4
BIOL 122	3	2	2	3	4
BIOL 140	3	2	2	3	4
BIOL 142	3	2	2	3	4
BIOL 150	1	4	3	0	3
BIOL 180	3	4	1	3	1
BIOL 182	2	4	1	3	1
BIOL 200	1	4	1	1	1
BIOL 202	1	4	1	1	1
BIOL 204	1	3	1	1	1
BIOL 206	1	4	1	1	1
BIOL 220	3	4	3	1	1
At least 6 units from:					
AG 101	4	4	4	3	2
AG/ENVS 110	4	4	4	4	3