

**Assessment of Student Learning Outcomes
Spring 2010
SCIENCE**

Course	Number	Outcome Measure	PLO Assessed	ILO Supported	Assessment Method	Summary of Results	Use of results to improve in one or more of these areas			
							Instruction	Curriculum	Technology	Assessment
BIOL	1306/1106	Students will explain the transfer of genetic information, the chromosomal theory of inheritance and the relationship of genetics to evolutionary theory.	3	Critical Thinking	Multiple choice exam	Students tended to show a low level of proficiency in understanding the processes involved in translating genetic information. Students tended to show a high level of proficiency in recalling facts and straight definition of mechanisms and processes involved in genetic transfer.	We will coordinate the presentation of the information between instructors better. We will spend more time comparing our lecture materials and timelines to ensure that students receive the information over which they are being tested.			We will collectively write 15 multiple choice questions which assess both reading and application of the information relevant to the specific SLO. We will all use the same questions which will be embedded within our regular exams.
BIOL	1307/1107	Students will demonstrate knowledge of theoretical systematics and taxonomy.	3	Critical Thinking	Multiple choice exam	The average grade on the exam was: 001: 69.4% 002: 67.4% SHS: 33.3% DHS: 50.0%				We will include dual-credit instructors in the planning and writing of future assessment questions.

BIOL	2301/2101	Students will be able to locate & identify the various regions of the human body, as well as the organs and functions associated with these regions.		Critical Thinking	Multiple choice exam	Class average was: 001: 76.5%. 002=70% 004=72% 005=66% 006=70% 007=62% 081=82% 082=72% 701=57.6% 781=76%				We will explore the possibility of using PAR Score as a system for evaluating the appropriateness of our multiple choice questions
BIOL	2302/2102	Students will be able to demonstrate an understanding of the structure and function of the human body and its interrelatedness.		Critical Thinking	Multiple choice exam	Lecture exam questions concerning the urinary system were analyzed. Results, regardless of the class time, location, or instructor, were remarkably similar, with students mastering an average of 68% of the questions asked. Results from SLO assessment, and other departmental research, indicate that students are not prepared for A&P II.		We will take a request to Curriculum Committee to have successful completion (C or better) of A&P I (Biol2301/2101) as a pre-requisite for A&P II. If approved, urinary questions will be analyzed to see if improvement in % mastery increases.		
BIOL	2321/2121	Students will demonstrate critical		Critical Thinking	Unknowns lab report/journal	001: 73% 002: 88% 003: 74%				We will discuss and decide the mixing of

		thinking, problem, solving, and decision making while identifying two bacteria in mixed culture.				004: 86% 005: 94% 006: 72% 081: 67% 701: 79%				unknown organisms, and consistently follow the decision when preparing the tubes of unknowns. The professors will also look at the unknowns missed to see if more students missed their unknowns when the mixture contained organisms with the same gram reaction.
BIOL	2404	Students will associate anatomical terminology with organ or structure location.		Critical Thinking	Multiple Choice Questions	Students answered five questions on anatomical terminology and organ or structure location. Students got 77.8% of the answers correct.	The topics will be given added emphasis during future classes to ensure that students learn the important concepts.			Questions utilized will be re-evaluated, and additional test questions will be added to assess the student learning of the concepts.