

Biology

FELOs in Biology Courses, F2020-S2021

B. PLNU General Education course (BIO 1004)

FELO 1c: Information Literacy

Students will be able to access and cite information as well as evaluate the logic, validity, and relevance of information from a variety of sources. This outcome will be measured yearly via direct, summative assessment.

Outcome Measure: Signature Assignment: Multiple choice questions on the final exam taken from the Test of Scientific Literacy Skills (TOSLS). The whole class was assessed.

Criteria for Success: At least 60% of the students will answer the questions correctly (an average of 60% for all of the questions). 60% was chosen since this is an introductory course for non-science majors. Questions from the TOSLS were chosen that specifically addressed information literacy and were appropriate for the content of each course.

Longitudinal Data:

	FALL, 2019		SUMMER, 2019		SUMMER, 2018	
Class		% of Students Answering TOSLS Questions Correctly (Ave ± S.D.)	n	% of Students Answering TOSLS Questions Correctly (Ave ± S.D.)	n	% of Students Answering TOSLS Questions Correctly (Ave ± S.D.)
BIO1004	43	83 ± 15	16	88 ± 13	22	79 ± 12

Conclusions Drawn from Data: The students in BIO1004 are meeting the criteria for information literacy. These data were not collected in 2020 or 2021 due to COVID.

Changes to be Made Based on Data: We will continue to use these questions for summative assessment in our GE courses.

Rubric: Gormally, C., Brickman, P., and Lutz, M. “Developing a Test of Scientific Literacy Skills (TOSLS): Measuring Undergraduates’ Evaluation of Scientific Information and Arguments.” *C.B. E. Life Science Education* 11(4): 364–377 (2012).

BIO104: Questions 5, 9, 10, 17, 22, 27