Academic year 2024-2025

BS in Environmental Science - BS-EVSC Learning Outcomes

Outcome 1 - Limnological research skills

Students will perform limnological field and laboratory protocols with technical accuracy.

Rational: Limnology is a practical course that teaches students the necessary field and laboratory skills to be successful in environmentally related professions. The class project is a cumulative field and laboratory exercise where students apply the knowledge and skills learned in the Limnology class

Environmental Science students enrolled in Limnology (4430) will:
1. Collect field and laboratory data.
2. Analyze and interpret the data using acceptable techniques.
3. Develop written reports that are well organized and clear to a lay person.

MEASURES	RESULTS	ACTIONS
Measure 1 - Limnological research skills Environmental Science students enrolled in Limnology (4430) will: 1. Collect field and laboratory data. 2. Analyze and interpret the data using acceptable techniques. 3. Develop written reports that are well organized and clear to a lay person. The following rubric will be used for assessment of each Environmental Science student enrolled in the Limnology class. The instructor will circle the level that applies for each student. Direct - Assignment *Limnology: BIOL 4430* **Target** Target - The desired level of performance for Environmental Science students in the Limnology class was 3.0 out of a four point scale on the Limnology rubric. This represents an increase from a target of 2.5, which was used prior to 2024. limnology assessment.pdf	MET limnology findings 2025.pdf **Analysis** The target level of performance was exceeded for all four of the rubric dimensions	*No actions have been added.*

Outcome 2 - Population and community structure research

Students will perform field and laboratory protocols for studying populations and community structure and interpret these data in a scientific report.

Rational: Populations and communities are quantified and described in ecology using a standard set of procedures and statistics. This laboratory exercise and paper will evaluate the student's ability to collect data, calculate and interpret the statistics, and describe the populations and community.

Environmental Science students enrolled in Ecology (Biology 4460) during Fall semester will perform field and laboratory methods used to describe community structure of a tree and shrub community in southeast Texas.

MEASURES	RESULTS	ACTIONS

Measure 2 - Population and community structure research Environmental Science students enrolled in Ecology (Biology 4460) during Fall semester will perform field and laboratory methods used to describe community structure of a tree and shrub community in southeast Texas. The following rubric will be used for assessment of each Environmental Science student enrolled in the Ecology class. The instructor will circle the level that applies for each student. Direct - Assignment *Ecology: BIOL 4460* **Target** Target - The desired level of performance for Environmental Science students in the Ecology class was 3.0 out of a four point scale on the Ecology rubric. This represents an increase from a target of 2.5, which was used prior to 2024. ecology assessment.pdf	MET ecology findings 2025.pdf **Analysis** The overall average performance level for Environmental Science students in the Ecology class was 3.0 ± 0.2 out of a four-point scale on the Ecology rubric, meeting the target level. For the individual rubric dimensions, two of the four exceeded the target level	*No actions have been added.*

Outcome 3 - Apply knowledge in environmental science internship expe

Students will apply the knowledge gained from the environmental science curriculum in a one term internship in which they must learn the duties of their internship and conduct themselves in a professional manner.

Rational: The internship is the actual application of the knowledge learned in the Environmental Science curriculum to real world situations. The student gets on the job experiences and learns how to behave in a professional manner.

MEASURES	RESULTS	ACTIONS
Measure 3 - Apply knowledge in environmental science internship experience The following rubric will be used to assess each Environmental Science student in the internship program. Entries in the student's daily journal, the student's summary report, and the evaluation from the student's supervisor will be used to score the assessment dimensions. Direct - Other *Undergraduate Problems: BIOL 4300* **Target** Target - The desired level of performance for Science students in the internship program was 3.0 out of a four point scale on the Environmental Science Internship Experience rubric. This represents an increase from a target of 2.5, which was used prior to 2024.	MET internship findings 2025.pdf **Analysis** The overall average performance level for Environmental Science students in the internship program was 3.8 ± 0.2 out of a four-point scale on the Environmental Science Internship Experience rubric, exceeding the target level. The desired level of performance was exceeded in all four of the specificrubric dimensions	*No actions have been added.*

internship assessment.pdf		