

LIFE AND PHYSICAL SCIENCES
Student Learning Outcome Alignment Form

Course Prefix/Number: BIOL 2306

Course Title: Environmental Biology

Core Objective	Course SLO	General Learning Activities	Assessment
<p>Critical Thinking Skills</p>	<p>SLO # 7. Describe environmental hazards and risks and the social and economic ramifications.</p>	<p>Students will participate in various field trips to local entities such as wastewater treatment plants, the New Boston landfill, local paper mills, a local superfund site—Carver Terrace, etc. Each student will submit a written report for each trip detailing insights gained from the trips, and summarizing major functions including environmental risks and benefits of each entity.</p> <p>(See attached field trip list, write up assignment)</p>	<p>Exam questions. See attached rubric.</p>
<p>Communication Skills</p>	<p>SLO # 5. Quantify and analyze the impact of lifestyle on the environment</p>	<p>Students will develop a campus and city-wide recycling program creating a report detailing the steps involved in completing this task, developing a budget, drawing a map of the area indicating position of bins, etc., sample job postings for workers, sample memos to employees, a list of applicable state laws pertinent to the recycling program, and suggested training. Students will present their programs to the class.</p> <p>(see attached Recycling Program assignment)</p>	<p>Exam questions. See attached rubric</p>

<p>Empirical & Quantitative Skills</p>	<p>SLO # 8. Describe ecological and statistical techniques and approaches used in the study of environmental biology.</p>	<p>Students will participate in the Texas Stream Team Initiative. In this program, students attend a workshop to gain state certification in water testing, then in groups of 2 or 3 participate in monthly monitoring of a local body of water. Stream Team members test for temperature, conductivity, pH, and dissolved oxygen, completing a Texas Stream Team Environmental Monitoring Form. They compare current readings with past, and look for trends.</p> <p>(see attached monitor form)</p>	<p>Exam questions. See attached rubric</p>
<p>Teamwork</p>	<p>SLO # 8. Describe ecological and statistical techniques and approaches used in the study of environmental biology.</p>	<p>Students will participate in the Texas Stream Team Initiative. In this program, students attend a workshop to gain state certification in water testing, then in groups of 2 or 3 participate in monthly monitoring of a local body of water. Stream Team members test for temperature, conductivity, pH, and dissolved oxygen, completing a Texas Stream Team Environmental Monitoring Form. They compare current readings with past, and look for trends.</p> <p>(see attached monitor form)</p>	<p>Exam questions. See attached rubric</p>