

Appendix I. Implemental Teacher Standards

Implementing Common Core Standards & Essential Standards

Mary S. Fabian

CCSS.ELA-Literacy.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

Students will learn to use plankton nets to capture larval forms of various metamorphic organisms in surface waters. Additionally, students will be required to create a dose-response graph based on the data collected.

CCSS.ELA-Literacy.RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-Literacy.RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Students will complete a capstone activity in which they will need to integrate material from many different units from the semester. They will evaluate the effects of pollutants on tadpole metamorphosis and then synthesize this information into a recommendation for capping pollutant levels in surface waters.

NC Essential Standard EEn.2.5 Understand the structure of and processes within our atmosphere.

Students will be completing a significant number of activities related to this standard, including studying atmospheric composition, weather and climate, and ocean-atmosphere interactions. Students will also be investigating the effects of increased atmospheric disturbances leading to ocean acidification.

NC Essential Standard EEn.2.8 Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.

Students will be studying anthropogenic climate change and its relation to coral reef bleaching.