

Science Instructional Expectations

(for Regents-Year courses, treated as year-long experiences)

Daily	Per Unit	Per Course
<ul style="list-style-type: none"> • Aim that addresses an appropriate measure of content • Motivation to engage students and open lesson • 3-5 diagrams taken directly from previous Regents that are used in developing and processing new information • Cooperative learning activity (form a quick turn and talk to an extended inquiry activity that produces a solution to a specific question/problem) • At least one previous Regents question that is fully processed/annotated. • Questions sets that scaffold from Identify and State to Describe, Explain, and Predict. • Student discussion that utilizes the discussion prompts: add, challenge, connect, and summarize. • Several checks for understanding that require students to “reprocess information” and create their own questions. • Pre-writing (template) or writing component 	<ul style="list-style-type: none"> • Several writing samples that require students to describe and explain in detail in which they cite specific content and/or evidence. • Process as much information as possible through the reading and creation of graphs, tables, and diagrams. • Developing specific science process skills such as measuring, communicating, predicting, interpreting data, and formulating models. • Conduct laboratory experiences and write up appropriate laboratory reports that demonstrate the understanding and abilities of a specific skill or express the relationship between two variables • Express the content of the unit in terms of the theme, relationships, a visual, connection to prior content, and potential assessment questions. • Categorize the content of the unit from the big ideas to the specific content with specific representational examples. • Design an experiment and/or research that explores a variable(s) related to the unit. • Performance Task 	<ul style="list-style-type: none"> • Understanding application of the Scientific method, inquiry, and application of content to real-world problems and issues. • Communicate their ideas in a written format that argues a position by presenting research and data to support their position. • Utilize the skills and protocols of research to share ideas and critique the ideas of others through various media formats. • Developed skill set that reflects Basic and Integrated Science Process Skills that allows them to effectively ask and answer their own questions. • A success model that includes specific structures for activities such as taking notes, collecting and organizing information, reasoning, and analyzing a situation and/or data. • Extended research project that requires a written report, an oral presentation, and a project display board.