

Earth Science Assessment Plans Rev. 4/3/2018

Earth Science	14-15	15-16	16-17	17-18	18-19	19-20
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**ERSCB10 - Introduction to Earth Science**

• Upon completion the student will be able to: demonstrate their knowledge regarding materials that make up the earth; mineral physical properties, classifying major rock types, and the associated geologic environments related to the rock cycle.	X		X	X		
• Upon completion the student will be able to: demonstrate their knowledge regarding geologic processes that shape the earth's surface; common land features produced from erosional processes of water, wind, and ice.	X		X	X		
• Upon completion the student will be able to: apply the theory of plate tectonics and how tectonic plate interactions produce geologic environments and their associated rock types (igneous, sedimentary, and metamorphic).	X		X	X		
• Upon completion the student will be able to: decipher geologic history using various relative dating techniques and apply the concept of uniformitarianism vs. catastrophism and the geologic time scale when unraveling earth history.						X
• demonstrate their knowledge regarding atmospheric processes that govern the earth's climatic patterns, weather systems, moisture, clouds and precipitation.				X		
• Upon completion the student will be able to: their knowledge regarding the earth's place in the universe; solar system and beyond the solar system and the physical laws that govern the universe: Universal Gravitational law, Kepler's laws of planetary motion.					X	
• Upon completion the student will be able to: apply the various steps in the scientific method that leads to the "accuracy" of earth processes and modern astronomy explained in lecture and the textbook						X
• Upon completion the student will be able to: man's place in earth's history and how man has impacted the earth's spheres.					X	

**ERSCB10L - Earth Science Laboratory**

• Demonstrate a knowledge of and recognize the processes that explain natural phenomena a. applying mineral identification skills by using physical properties to classify common minerals that make up the earth: applying rock identification skills using texture and composition to classify common rocks and associated geologic environments that relate to the rock cycle b. decipher earth's history using various relative dating principles. c. apply various basic atmospheric principles to discern earth's atmospheric layers, earth's climatic patterns, weather systems, moistures role, clouds, and precipitation d. Interpret earth's place in the solar system and universe by successfully demonstrating knowledge regarding astronomical distances and relative celestial sizes couple with interpretation of the HR diagram				X		
• Apply methodologies of science when approaching a problem a. Apply the various steps in the scientific method that lead to an accurate understanding of earth's processes.				X		
• .Apply logical quantitative and qualitative reasoning in solving problems or analyzing arguments a. demonstrate and apply knowledge regarding man's place in earth's history and how man has impacted the earth's spheres.				X		