

Strat/Sed Outcomes, Objectives

Outcomes are numbered: students will understand -
Objectives are subheadings under the outcomes - SWBAT

1. stratigraphic units and their applications.

- write the geologic time scale (previously learned in 212 but review is needed)
- describe the principles of sequence stratigraphy
- define and give examples of the different types of stratigraphic units

2. the processes that form sediment and sedimentary rocks: production, transport, deposition, and diagenesis.

- explain chemical weathering processes and their results
- describe the ways in which sediment can be transported and deposited
- explain how sediment is lithified by compaction or cementation

3. how to interpret the depositional environment for sedimentary rocks based on rock properties.

- classify sedimentary rocks according to standard classifications
- describe the properties of sedimentary rocks
- name characteristic properties for stream, beach, eolian, reef, and deltaic sediments

4. how to design, carry out, interpret, and present the results of research on sediment or sedimentary rocks.

- write a research proposal stating a problem, hypotheses, and approach to testing the hypotheses (may be done jointly)
- find appropriate references to previous work and cite them correctly
- write a paper explaining the research, its results and interpretation