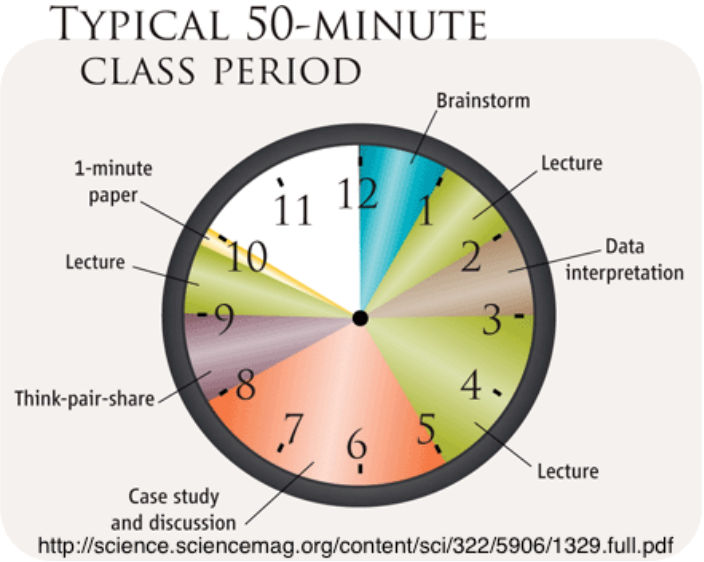
Topics in Science Teaching: Through the Visualization Lens

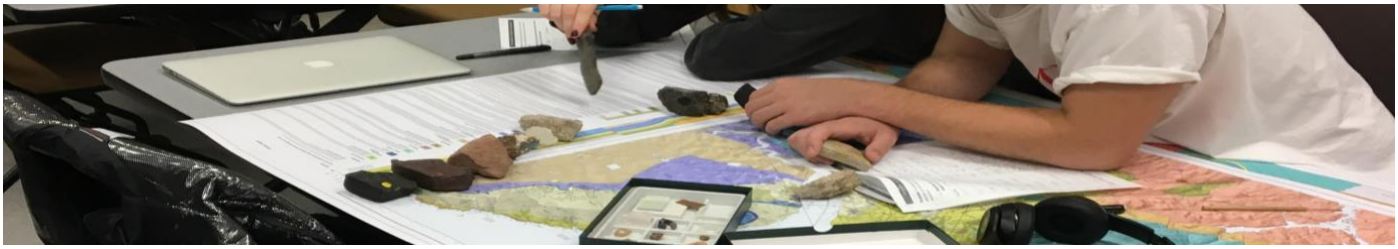


In this studio course, we explore a number of key questions in science teaching and learning through the lens of visual representations (such as graphs, maps, symbols, diagrams, and photographs) used in science.

Dates: Fridays, June 29 and July 6 (Truro Campus only)

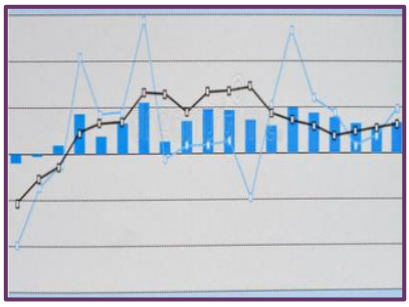
Time: 10:30-3:30

Location: Haley Institute, room 254, Truro



Requirements:

The Studio Course is project based. Completing the project will require certificate participants to submit two pieces of writing:



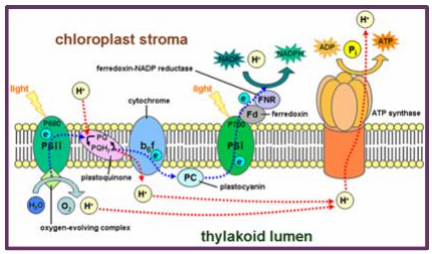
1. A course module or detailed lesson plan incorporating the use of visual representations particular to that scientific discipline, designed through consideration of some of the key questions and issues discussed in the course.
2. A reflection that comments on the participant's thinking about science teaching in general and key questions/issues arising in the course, in particular how the module or lesson plan is designed to improve students' learning and understanding of the course material, and how the module or lesson plan will fit into the course as a whole.

- Attendance at both days of the course is required, and part of the final day will be project working time and an opportunity for questions and further discussion.
- Those participating for credit towards the Faculty Certificate Program are expected to attend all sessions and complete all Studio Course activities.

Learning Outcomes… *Successful Studio Course participants will:*

- Start asking questions about the nature of science and what it means to be a chemist, biologist, earth scientist, etc., in the 21st century
- Investigate the use of visuals as a means to think about, do, and communicate science
- Identify and describe key principles of learning and development and their implications for teaching and learning in the university sciences
- Examine such considerations as uncertainty and randomness, scale and patterns, rates of change and quantitative reasoning, bias and multiple perspectives, etc., and explore how we might address these to support students' scientific understanding
- Evaluate possibilities for teaching problem-solving, as well as critical and creative thinking to enhance students' learning in the sciences

For more information on the Studio Courses, please contact the Instructors:



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