SCIENCE 1206
COASTAL ECOSYSTEM MONITORING

COASTAL EXPLORERS FIELD SCHOOL

Join us for a fantastic field trip experience and get your students involved in citizen science! The Coastal Ecosystem Monitoring (CEM) program readily aligns with Science 1206 (Units 1 & 4) and is suggested by the Department of Education and Early Childhood Development as co-curricular resource for this course. Access the details through their Professional Learning Portal.

Oceans Learning Partnership jointly offers this hands-on, field-based program in collaboration with Manuels River Interpretation Centre, Bonne Bay Marine Station, Parks Canada, Fisheries and Oceans Canada (DFO), and First Nations partners at different locations throughout the province. The program helps connect your students to their nearby coastal environments through this unique 2-hour experience.

WHAT WILL THE PROGRAM OFFER?

The program allows students to learn about scientific monitoring and contribute real scientific data to DFO. They learn valuable data collection skills while using appropriate tools to measure different environmental indicators including weather and water quality. They discover some of the plants and animals found in their local ecosystem, as well as investigate the impacts of humans on the coastal environment.

This program was developed in collaboration with Dr. Robert Gregory and his team at DFO in St. John's, and Parks Canada. Data collected by your students will be used to increase baseline information and help track changes over time to assess the health of coastal ecosystems in NL.

LOGISTICS

- Site will vary depending on your location
- Program can be offered in Fall or Spring
- 2 hrs per program + travel time. Must be scheduled in advance
- 30 students maximum per program
- 1 chaperone per 15 students is recommended
- Cost: Site dependent. Please contact us for details
- Field trip requirements and teacher resources will be sent once program is booked!

LOCATIONS

Current sites:

- Worsley Park, Conception Bay South
- Bonne Bay area
- Newman Sound, Terra Nova National Park

Coming soon:

- Conne River (Coast of Bays)
- Northwest River (Labrador)
- Champney's West

HOW DO I SIGN UP MY CLASS?

For more information or to sign up, please contact Chantal Vincent at chantalv@oceanslearning.net

CURRICULUM LINKS

This program is designed to tie in to the Science 1206 curriculum, particularly for Unit 1: Weather Dynamics and Unit 4: Sustainable Ecosystems. Outlined below are the STSE, Skills and Knowledge outcomes that the students will gain through participation in this program.

GCO 1 - STSE

34.0 Illustrate how science attempts to explain natural phenomena

38.0 Describe examples of Canadian contributions to science and technology

51.0 Defend a decision or judgment and demonstrate that relevant arguments can arise from different perspectives

78.0 Compare the risks and benefits to society and the environment of applying scientific knowledge or introducing a new technology

GCO 2 - SKILLS

3.0 State a prediction and a hypothesis based on available evidence and background information

9.0 Use instruments effectively and accurately for collecting data

17.0 Compile and display evidence and information, by hand or computer, in a variety of formats, including diagrams, flow charts, tables, graphs, and scatter plots

20.0 Evaluate the relevance, reliability, and adequacy of data and data collection methods

21.0 identify and explain sources of error and uncertainty in measurement and express results in a form that acknowledges the degree of uncertainty

25.0 Communicate questions, ideas, and intentions, and receive, interpret, understand, support, and respond to the ideas of others

GCO 3 - KNOWLEDGE

31.0 Describe and explain heat transfers in the water cycle

33.0 Describe and explain heat transfer in the hydrosphere and atmosphere on the development, severity, and movement of weather systems

67.0 Explain various ways in which natural populations are kept in equilibrium, and relate this equilibrium to the resource limits of an ecosystem

71.0 Analyze the impact of external factors on an ecosystem

73.0 Explain how biodiversity of an ecosystem contributes to its sustainability

74.0 Explain why different ecosystems respond differently to short-term stresses and long-term changes

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Oceans and Habitat | Océans et Habitat
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