

# Incorporating Engineering and Three Dimensional Learning into the Science Classroom

Saturday March 4, 2017 | 8:30 am – 12:00 pm  
Southern Connecticut State University Jennings 111

**Presenter:** Gail Emilsson, *Connecticut Center for Advanced Technology*

**Objectives:** Participants will be able to successfully incorporate an engineering design problem into a unit of study by practicing with an oil spill cleanup kit and using it to plan for three-dimensional learning.

## AGENDA

- 8:30 – 8:45** Sign in, welcome, breakfast | Carol Jenkins, *EO Coordinator, CRISP*
- 8:45 – 9:15** Initiation with Four Corners activity and writing initial arguments
- 9:15 – 10:00** Oil spill cleanup demonstration, explore current events, DCI ETS1.A – Defining and Delimiting an Engineering Problem, SEP1 – Asking Questions and Defining Problems, Venn diagram of NGSS, ELA, and Math practices
- 10:00 – 10:15** Break
- 10:15 – 10:45** Introduction to CRISP “Bioremediation: Oil Spills” kit, DCI ETS1.B – Developing Possible Solutions, revise arguments, final Four Corners prompt
- 10:45 – 11:15** Discuss links from activity and share out:
- Other DCIs (PS, LS, or ESS) that could be learned with oil spill activity
  - DCI ETS1.C – Optimizing the Design Solution
  - ETS2 – Links Among Engineering, Technology, Science, and Society
  - Nature of Science
  - Crosscutting Concepts
- 11:15 – 11:45** Collaboration and Planning
- 11:45 – 12:00** Wrap up, Engineering Resource List, and Survey

<b>Name:</b>	<b>Initial</b>	<b>Revised</b>
<b>Claim</b>		
<b>Evidence</b>		
<b>Reasoning</b>		
<b>Argument</b>		