



## NGSS Professional Development Workshop Series Crosscutting Concepts

Wednesday January 25, 2017, 9:00 AM – 3:30 PM Fee: \$125 Credits: 5.5 PDU Hours

In 2016-2017, the Science Education Institute at Raritan Valley Community College will be offering a series of seven one-day workshops designed to help teachers prepare for the implementation of the Next Generation Science Standards (NGSS). This workshop is the fifth in that series.

In this workshop, participants will receive an introduction to the Framework for K–12 Science Education – a critical document for understanding and implementing the Next Generation Science Standards (NGSS). The NGSS presents a conceptual shift in K-12 science education in which students, over multiple years of school, actively engage in Science and Engineering Practices and apply Crosscutting Concepts to deepen their understanding of the Core Ideas in Science and Engineering.

Producers

Producers

Decomposers

Matter

Energy loss (heat)

This workshop will focus on a *Crosscutting* 

Concepts with an emphasis on Systems and System Models, Energy and Matter, and Stability and Change. Participants will be engaged in exemplary investigations in a variety of science content areas to deepen their understanding of these Crosscutting Concepts. They will take away strategies to help students define the systems related to the phenomena they are investigating, how to trace the matter and energy into, within, and out of these systems, and consider which parts of the system are changing and on what scale. Although the focus will be on Crosscutting Concepts, teachers will also deepen their understanding of related Science and Engineering Practices. There will be opportunities for participants to reflect on the investigations and to plan lessons aligned to the NGSS.

The workshop will be held at Raritan Valley Community College in North Branch (NJ) and will begin promptly at 9 am and end by 3:30 pm. Light breakfast and lunch will be provided.

The workshop leader, Dr. Wil van der Veen, is a nationally recognized expert in science education and is a member of the New Jersey State Leadership Team for the NGSS. The workshop will be cofacilitated by several K-12 educators from the NGSS Teacher Leader Program – a collaboration between Princeton University, Rider University, and Raritan Valley Community College.

For more information and to register online go to our website at www.raritanval.edu/njace or contact Mariel O'Brien at mariel.obrien@raritanval.edu or 908-526-1200 Ext 8942.

For customized training on the NGSS in your district contact Dr. Wil van der Veen at wil.vanderveen@raritanval.edu or 908-526-1200 Ext 8566.