



# **Summer Environmental Workshops at Hope College**

## **Free Workshops for Middle and High School Teachers**

- Immerse your students in field research in preparation for the new Michigan Science Standards
- Earn continuing education credits
- Develop lesson plans for your classroom
- Get access to a lending-library of equipment for your own classroom

### **Molecular Modeling**

*June 22-26*

Computational science and modeling (CSM) has become a critical element in essentially all fields of science. Researchers no longer think about experiment and theory as two sides of discovery, but rather experiment, theory, and computational modeling as three pillars that support progress in science. We will provide you with the experience you need to employ CSM in chemistry (i.e. molecular modeling) in a way that addresses multiple National and State Science Standards.

### **Field Studies Using Digital Panoramas**

*July 6-10*

This workshop prepares high school teachers to set up a field site and monitor it with their students using digital photos. The methods can be used in a wide variety of field studies in biology, geology, and environmental science. The workshop focuses on an ongoing project where students are using digital photos to monitor changes in sand dunes, as an example of how teachers might help students develop their own local sites of interest in preparation for meeting Next Generation Science Standards.

### **Air Quality Measurement**

*July 13-14*

How does air quality vary in your home, neighborhood and throughout the day? Lead students in building an air quality sensor and learning to take and interpret air quality data. The workshop will refine the curricular materials, discuss issues of scaling up the project, develop additional project ideas and make additional connections with community partners.

Check out our website for high school and other student programming!

 **Hope COLLEGE**

Center for STEM  
Inquiry

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Registration at [hope.edu/csi](http://hope.edu/csi)

Applications are being accepted now, so apply today!

On-campus housing available upon request.



**Hope COLLEGE**

Howard Hughes Medical Institute Program