



## Workshop Series

### Audience:

Science and social studies teachers; grades 4—9.

### Description:

Don't miss this opportunity to learn how to teach environmental science in a way that will engage students! The Michigan Environmental Education Curriculum Support (MEECS) contains Michigan-specific units which provide an opportunity for students in grades 3-9 to learn about Michigan's environment and economy through outstanding, inquiry oriented, data-based lessons in science and social studies. The units have been field tested by 120 teachers in over 200 Michigan classrooms. For more information on MEECS visit the website <http://gvsu.edu/s/S0>.

This MEECS workshop series will focus on three of the seven units in the MEECS curriculum. Each day will consist of a full day (6 hours) of training on a single MEECS unit. The unit will be presented along with the integration of outdoor experiences related to the unit. The units are described below:

#### Day 1 (June 16): Ecosystems & Biodiversity

This unit examines how organisms interact with their environment using a Michigan context to provide students with a solid foundation in understanding basic ecological principals, as well as the importance of biodiversity as it relates to Michigan's environment, economy, and society.

#### Day 2 (June 17): Climate Change

The MEECS Climate Change unit is multi-faceted, comprised of two separate functional units. *Climate Change: Science* focuses on the physical nature of climate, and focuses on causes, analysis, modeling, and an overall exploration into mechanisms of the Energy Cycle. *Climate Change: Impacts* focuses on the repercussions of climate change to engage more students to be future-oriented. The effects of climate change are examined at the global and local scales; special emphasis is placed on climate change as it pertains to Michigan and the Great Lakes.

#### Day 3 (June 18): Water Quality

In this unit, students discover the essential role of water in Michigan's economy and our lives, calculate direct and indirect water use, explore how Michigan watersheds are connected to the Great Lakes, identify characteristics of healthy streams, analyze Michigan stream data, and investigate challenges to the Great Lakes.

Teachers attending will receive the teacher's manual and the full packet of materials needed for the lessons including maps, videos, posters, and other print materials. All units are aligned to both the current Michigan Grade Level Content Expectations and the NGSS.

### Facilitators:

- Janet Vail, Associate Research Scientist, Annis Water Resources Institute, Grand Valley State University
- Jessica Wagenmaker, Science Teacher, Holton Middle School
- Michael Libbee, Professor of Geography, Central Michigan University & Co-coordinator, Michigan Geographic Alliance

### Location

GVSU Allendale Campus  
Mackinac Hall

### Time

8:00 am—3:30 pm daily

### Dates

#### Day 1

- Tuesday, June 16, 2015
- Grades 4—6

#### Day 2

- Wednesday, June 17, 2015
- Grades 6—9

#### Day 3

- Thursday, June 18, 2015
- Grades 6—8

### Registration

- Registration fee of \$20 per day.
- Participants may elect to attend one, two, or three days of the workshop; registering for any combination of the days.
- Lunch and all materials, including the MEECS curriculum materials for the day's topic, are included.
- Registration is limited to 25 participants per day.
- Registration deadline is June 5, 2015.

### Sponsored by

- GVSU Regional Math and Science Center
- Groundswell Program
- Michigan Department of Environmental Quality



Michigan Environmental Education Curriculum Support (MEECS)

# Workshop Series Registration Form

Hosted by GVSU Regional Math and Science Center

Made possible with funding from the Michigan Department of Education.

First Name: \_\_\_\_\_ M.I. \_\_\_\_ Last Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

School: \_\_\_\_\_ District: \_\_\_\_\_

Email (that you check during the summer): \_\_\_\_\_

Grade/Position: \_\_\_\_\_ Gender: \_\_ Male \_\_ Female

Ethnicity: \_\_ African Am \_\_ Arab Am \_\_ Asian Am \_\_ Caucasian \_\_ Hispanic \_\_ Native Am \_\_ Other

**Please select all that apply:**

Day 1: Tuesday, June 16, 2015 – Ecosystems & Biodiversity (grades 4 – 6)

Day 2: Wednesday, June 17, 2015 – Climate Change (grades 6 – 9)

Day 3: Thursday, June 18, 2015 – Water Quality (grades 6 – 8)

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**Graduate Credit / SCECHs:**

GVSU Graduate: If a participant attends all three days, one graduate credit can be earned for an additional cost of \$562 in-state and \$752 out-of-state tuition.

SCECHs: Pending approval, SCECHs will be available for any combination of the days (one, two, or three days) at an additional cost of \$5.00 per day.

**Lodging:**

Sleep Inn is located at 4869 Becker Dr, Allendale, MI 49401, 1.2 miles from the GVSU Allendale Campus. To make reservations, call 616.892.8000. Mention that you are visiting GVSU to get a 10% discount.

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**Registration Deadlines:** June 5, 2015

**Cost:** \$20 per day

**Register by FAX:** (616) 331-3412

**Remit payment to:**

MEECS / RMSC  
C-1-12 Mackinac Hall  
GVSU  
1 Campus Dr  
Allendale MI 49401

**Confirmation:** Confirmations will be sent to email.

**Amount Due:** \_\_\_\_\_

**Register by Email:** [ridgec@gvsu.edu](mailto:ridgec@gvsu.edu)

**For more information, contact:**

Karen Meyers, Director  
Regional Math and Science Center  
616.331.2515 or [meyersk@gvsu.edu](mailto:meyersk@gvsu.edu)