Museum Institute for Teaching Science

2016 Summer Professional Development Institute For Grades 3-8 Educators

Using Science and Engineering Design Practices to Engage Your Students in Inquiry-Based Learning



Metro-South Region

Feathers, Rocks, Flights, Wildlife and Shocks: The Importance of Human Connections With Nature

July 11-15



Come get your feet wet with inquiry-based learning!

Weston Observatory





Mass Audubon's Blue Hills Trailside Museum 1904 Canton Ave Milton, MA 02186

Metro-South Region

Institute for Grades 3-8 Educators Feathers, Rocks, Flights, Wildlife and Shocks: The Importance of Human Connections With Nature

Do you feel disconnected from the world around you? Does your work environment have you staring at four walls, isolated from the sun or weather? Do you want to find ways to engage your students in an appreciation of the outdoors using classroom and field- based activities? This engaging institute will highlight ways humans influence and are affected by the natural world, even in their own backyard, and will examine the physical, chemical and biological factors at play in these interconnected relationships. Learn how



scientists keep their fingers on the pulse of the earth, and delve into the physical processes that cause earthquakes. Investigate how animals and animal behavior are used by scientists and industry as inspiration to develop engineering solutions for everyday problems. Explore the role of geology in creating the unique habitat of our local Blue Hill Reservation, and gain insight into the impact of wildlife management strategies on humans and the ecology of an environment, including a focus on sustaining wildlife populations. Research how birds of prey can take advantage of landforms to conserve energy. Blend your new knowledge of meteorology and engineering design to build your own version of a flying contraption for human use. Open the door to new classroom possibilities for you and your students through inquiry-based, minds-on, hands-on experiences, and use the Science and Engineering Practices to understand the interconnectedness of the natural world.

Partners: Mass Audubon's Blue Hills Trailside Museum, Blue Hill Observatory and Science Center, Weston Observatory

Course Dates: July 11-15 (9:00 am - 4:00 pm); Half Day Introductory Session June 18; Half Day Fall Callback November 12

Registration Fee: \$350/participant; \$325/participant for team of 2 or more teachers from the same school district

PDPs and Graduate Credit: Cambridge College (3 credits, 67.5 PDPs; \$150), Framingham State University (3 credits, 67.5 PDPs; \$225); 40 PDPs available without graduate credit. PDPs and graduate credit will be awarded after participation in the Fall Callback. Participate in content and skill development sessions taught by professional educators and scientists at each collaborating partner organization. Daily activities include indoor inquiry-based classroom experiences and outdoor field experiences. Take home investigations you can use in your classroom and a collection of teaching resources and field trip ideas!

- Learn how to present the Science and Engineering Practices to your students and how they relate to science inquiry.
- Explore STEM resources in your community.
- Get ready to meet the forthcoming revised MA Science and Technology/ Engineering Standards.
- **Become** part of a network of teachers from your region and across the state.



Visit www.mits.org for more info on this and MITS Professional Development Institutes in other regions and to register online.

For more information contact:

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