2019 Summer Institutes for Educators

To register for a teacher professional development workshop, please fill out this form or contact teacherpd@mtu.edu.

Engineering Applications in the Physical Sciences: June 19 – 28
This is a great chance for current or future teachers to experience real-world engineering projects first hand, and then see how to integrate a scaled down version into a class project for students to solve physical science problems. The course will show how engineers use principles from the physical sciences to solve problems and design systems. Key concepts will be linked to the Next Generation Science Standards and Michigan Curriculum Frameworks for precollege education. 4 credits

Moosewatch for Educators: Session 1: June 24 – July 1, Session 2: July 7 – 14, Session 3: July 21 – 28 *Limited to 5 participants per offering.
Moosewatch for Educators is a unique field experience in support of the ecological study of wolves and moose at Isle Royale National Park. Educators will receive the technical instruction needed to participate as a member of a backcountry research team. You will learn research methods, backcountry navigation, and wilderness living skills. The course will integrate aspects of earth science, botany, general ecology, and the use of literature in teaching science. 45 SCECHs

Diagnosis and Remediation of Reading Problems: July 1 – August 16
This online course is available to any teacher (Elementary or Secondary) to apply toward professional licensure. Whether you teach English language arts or physics, you and your students are “reading”- we read and code all the information we attend to. Many of the lessons we learn from reading alphabetic code can transfer to the challenges of reading numerical code. 3 credits

Glycobiology: The Missing Link in Our Science Class: July 15 – 17
Glycobiology, often termed as “the last frontier of biomedical science”, is at the confluence of several areas of basic science including chemistry and biology. Glycobiology provides conceptual framework that helps understand how living systems, from unicellular organisms to humans, function. It adds a new perspective to what we learn/teach in our biology and chemistry classes. This 3-day program will introduce some of the most important and relatable topics of Glycobiology to science teachers. The course offers lectures, hands-on lab experiments and discussions. 18 SCECHs

Promoting Interest in Science through Field Trips to the Belle Isle Aquarium: August 5 – 8 *First preference given to 5th grade teachers in Detroit.
Teachers gain skills in guiding their students in addressing 5th grade science and social studies standards using the Belle Isle Aquarium and participate in a variety of field and classroom activities/lessons led by the Belle Isle Conservancy, Wayne State University, and Michigan Tech University faculty and staff. 2 credits or 24 SCECHs. *Those registering for graduate credit will be expected to turn in 5 lesson plans following the workshop.

*Additional details can be found on Michigan Tech’s current institute’s website.