Towson University’s Center for STEM Excellence is excited to announce a 4-day professional learning workshop for elementary teachers of grades 3-5. The Insect Investigations: Using ‘bugs’ to engage students in the NGSS Science and Engineering Practices workshop will focus on how to use insects in your classroom to engage students in the Science and Engineering Practices that are an essential part of the new Next Generation Science Standards (NGSS). The workshop will be facilitated by Dr. Mary Stapleton, Director of Towson University's Center for STEM Excellence and Dr. Faith Weeks, a professor of entomology and science education at Towson University. Support for the Insect Investigations is provided by a generous grant from Wells Fargo.

Workshop goals include:
- increased knowledge about, and understanding of entomology and the role of insects in the environment
- increased understanding of how to handle and maintain live insects in the classroom
- increased knowledge about, and understanding of the NGSS Scientific and Engineering Practices
- increased ability to engage students in the Science & Engineering Practices using live insects
- self-reflection and assessment of teaching and of student learning

Who can apply? This workshop is appropriate for any elementary teacher of grades 3-5 in Maryland who is interested in incorporating insects into their classroom teaching and learning more about the NGSS Science and Engineering Practices.

What: The workshop will take place over 3 days in July, with a final follow-up meeting in November (see below for dates). Participants will work in a collaborative, hands-on, learner-centered environment to learn how to incorporate insects into their curriculum and actively engage their students in the Science and Engineering Practices that are at the core of the Next Generation Science Standards.

During the workshop, participants will engage in model lessons aligned with NGSS that focus on insects and explore how to handle a variety of live insects and maintain insect habitats in the classroom. Participants will be challenged to develop and implement a science lesson plan that includes entomology and is aligned with NGSS and report on the implementation during the Fall follow-up meeting. All participants will be provided with an insect ‘starter’ kit that includes live insects and the materials needed to keep them in the classroom.
Participants are expected to:
  • Complete a pre- and post-workshop survey and participate in all 4-days of the workshop
  • Create and implement a classroom lesson with insects that actively engages students in the Science
    and Engineering Practices. This will require some time outside of the workshop to complete.
  • Share implementation experience/plan with during fall meeting and complete a final written reflection.

Where: Towson University Center for STEM Excellence located at 701 E. Pratt St., Baltimore, MD, 21202.
Please note that the Center for STEM Excellence is located in the Inner Harbor of Baltimore, and not on
Towson’s main campus. Parking will be provided. A limited number of overnight accommodations may be
available in dorms on Towson University campus. If you live > 60 miles from the Center for STEM Excellence
you will be able to apply for overnight housing on the application.

When: Participants will be expected to attend all four days of the workshop:
  • Tuesday, July 7, 8:00 am – 3:30 pm
  • Wednesday, July 8, 8:00 am – 3:30 pm
  • Thursday, July 9, 8:00 – 3:30 pm
  • Saturday, November 7, 9:00 – 3:30 pm

Why: All participants who successfully complete the workshop will:
  • Be eligible for (3) Continuing Professional Development Credits (CPD) from MSDE
  • Learn more about implementing the new NGSS state science standards in their classroom, as well as
    learn how to effectively engage their students in science using insects
  • Receive an insect 'starter kit' that will include live insects and the materials necessary to keep them in
    their classroom

How:
  • Fill out the application at https://www.surveymonkey.com/r/InsectApp20.
  • Have your principal fill out the “Principal Support Form” found online at
    https://www.surveymonkey.com/r/insectPD20. Remember, it is your responsibility to forward the link
to your principal. Contact Dr. Mary Stapleton (mkstapleton@towson.edu) at any time to confirm
whether or not your principal has submitted their “Support Form”.
  • Applicants will be notified of acceptance status by April 15.

Please note that we will send a confirmation email for every application we receive. If you do not receive this
confirmation email, you can assume we did not receive your application and you should re-submit. Only
complete applications (application and principal support form) will be considered. Contact Mary Stapleton at
mkstapleton@towson.edu with any questions.