



ENHANCING THE QUALITY OF HIGH SCHOOL SCIENCE EDUCATION IN WISCONSIN

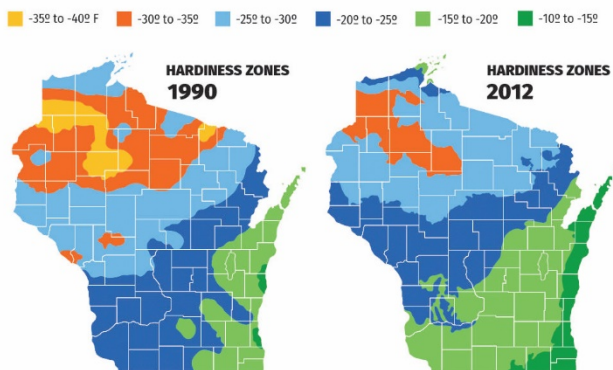
Climate Science Concepts for Your Classroom

The Wisconsin Initiative for Science Literacy is pleased to announce a series of workshops for high school science teachers. WISL aims to enrich excellence in classroom activities and will initially offer two workshops in the winter and spring of 2018. Other topics will be addressed in future summer and fall workshops.

We invite you to [apply](#) right away as space is limited. We encourage sharing this announcement and application form with fellow teachers.

- WHEN:** *Workshop A*
Saturday, February 3 & Saturday, March 3, 2018, 9:00 a.m. to 4:00 p.m.
- Workshop B*
Saturday, April 14 & Saturday, May 19, 2018, 9:00 a.m. to 4:00 p.m.
- WHERE:** Department of Chemistry, University of Wisconsin-Madison
- INSTRUCTORS:** Dr. Bassam Shakhshiri, Dr. Jerry Bell, Mr. Michael Boll and other WISL staff
- ELIGIBILITY:** Wisconsin high school science teachers at public and private schools
- ENROLLMENT:** 15-20 teachers in each workshop
- DEADLINE:** All applications are due to scifun@chem.wisc.edu
at **noon, Friday, January 19, 2018**
([DOWNLOAD APPLICATION FORM](#))
- NOTIFICATION:** Tuesday, January 23, 2018
- HONORARIUM:** Upon completion of both Saturdays of Workshop A *and* Workshop B: \$600.
Upon completion of both Saturdays of Workshop A *or* Workshop B: \$300.

PLANT HARDINESS ZONES



Why should we incorporate the science of climate and climate change into high school science courses? As our planet warms, the climate is changing. During the lifetime of our students the changes will become increasingly disruptive. It's important for them to learn about climate science and climate disruption, so they can make informed decisions about adapting to and mitigating the changes. Our biology, chemistry, earth science, and physics courses are excellent contexts for introducing this science.

Climate science is complicated, but it is based on fundamental concepts from our more familiar sciences. So the complexity offers opportunities to integrate climate science into teaching the concepts already included in your courses.

Consider this list: phase changes, biological and geological carbon cycles, light absorption and emission, heat and temperature, heat capacity, energy conservation, food webs, energy transfer, photosynthesis, molecular structure, dipoles, stoichiometry, burping cows, acids and bases, isotopes, gas laws and properties, metabolism. If any of these are part of your courses, you are ready to bring the basic science of the greenhouse effect, greenhouse gases, ocean acidification, sea level rise, and more to your students.

These two workshops are designed to help you see how to fit climate science into what you are already doing. Workshops A and B will introduce different concepts and activities and both include a mix of concepts from biology, chemistry, earth science, and physics. They will be complementary and largely independent, but participating in both will provide more examples and a broader view of what is possible.

Many of the activities will be directly usable or easily adaptable for use in your classroom. Others will be aimed to provide deeper background to enhance your perspective on climate science and climate change.

All the written and projected materials will be available to you electronically for use in your classrooms. Time will be available at the second session of each workshop for you to provide reflection and feedback on the first session and share any ways you have used the information and materials.

Questions and all correspondence should be directed to scifun@chem.wisc.edu