

Please post in your department!



Attention teachers of physics, chemistry, physical science, math!

For summer 2024, ASU offers research-informed courses for your professional development. 3-D learning!

These are ideal courses to meet re-certification requirements, qualify to teach dual enrollment/adjunct two-year college (TYC), or become highly qualified (ESSA) in physics or chemistry. They can count toward the ASU interdisciplinary *Master of Natural Science* degree (MNS) in physics, & graduate degrees in education. **Pre-service**, TYC, and CTE teachers find these courses useful, too. (updated 2/2024)

* After Feb. 14, reserve a seat for non-credit (clock hours) at <http://physics.asu.edu/node/2349>.

FREE! You needn't apply to ASU. Free course materials for all AZ participants.

* Arizona teachers who seek to qualify to teach dual enrollment: Apply NOW for a FULL-TUITION scholarship from the AZ Teachers Academy at ASU! Reply to jane.jackson@asu.edu for details.

* AZ teachers who want to prepare to add physics or chemistry certification: apply now for \$2000 scholarship, at <https://www.azed.gov/titlei/pd-pilot-program/> .

* After Feb. 14, apply for our full or partial tuition scholarships at <https://physics.asu.edu/node/2350>

Why: "Lifelong professional development is as essential for science teachers as it is for doctors. Typically, it takes at least 10 years of deliberate practice to reach a high level of expertise in any profession... Teachers need access to lifelong professional development like that provided in Modeling Workshops."

—ASU physics professor David Hestenes, co-founder of Modeling Instruction.

Modeling Workshops: (Each is 3 credits.)

June 3 to 21 on Tempe campus. MTWTh 8am-3:30pm. 8am - noon on Fridays:

PHS 530/PHY 480: Methods of Teaching Physics I: mechanics (Jeff Steinert, instructor. PS-H356)

PHS 594/PHY 494: Modeling Workshop in Mechanical Waves & Sound (Kirticia Jarrett. PS-H355)

CHM 594/CHM 480: Modeling Instruction in Chemistry I (Mitch Sweet. PS-H366).

CHM 594: Modeling Instruction in Chemistry II (Levi Torrison & Phil Root. PS-H357)

Courses from June 24 to July 25: (Each is 3 credits. No class on July 4.)

PHS 570: Spacetime Physics (1pm to 3:30pm MTWTh. Carl Covatto, instructor. PS-H355. Hybrid)

PHS 581/CHM 581: Structure of Matter (4 pm to 6:30pm MTWTh. Bob Culbertson, PS-H356)

Info at <http://physics.asu.edu> ; hover over "Degree Programs". For help with tuition scholarships, etc., contact Jane.Jackson@asu.edu, 480-314-1522. For graduate credit, apply to ASU at least 3 weeks before your course begins: <http://admission.asu.edu/graduate/nondegree> as a nondegree summer grad student (\$70 appl fee) -- no transcripts needed. Search for course at <http://webapp4.asu.edu/catalog>. Register for course at least 1 week before course begins.

