

Please post in your department!



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

For summer 2025, ASU offers research-informed courses for your professional development. 3-D learning!

These interactive engagement courses are ideal to meet re-certification requirements, qualify to teach dual enrollment in two-year college (TYC), or become highly qualified (ESSA) in physics or chemistry. They 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 9/2024)

Modeling Workshops: (Each is 3 credits.)

June 2 to 20, 2025 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 CASTLE Electricity (R McNamara, A Chapman. H355)

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

Graduate courses from June 23 to July 24, 2025: (Each is 3 credits.)

PHS 550: Physics & Astronomy (1pm to 3:30pm MTWTh. Carl Covatto, instructor. PS-H355)

CHM 560/PHS 560: Matter & Light (4 pm to 6:30pm MTWTh. Bob Culbertson, PS-H356)

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* After Feb. 1, 2025, 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 to ataaward@asu.edu for **full-tuition** scholarships from the AZ Teachers Academy at ASU! Also, reply to jane.jackson@asu.edu.

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

* After Feb. 1, 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

Info at <http://physics.asu.edu>; hover over "Degree Programs". Or <https://modeling.asu.edu>. For help on anything: 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 start. Syllabi, MNS degree: <https://modeling.asu.edu>



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