

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 1/2025)

Modeling Workshops: (Each is 3 credits; or you can take as non-credit for FREE – all or part of course.)

June 2 to 20, 2025 on Tempe campus. MTWTh 8am-3:30pm. 8am - noon on Fridays:

PHS 530/PHY480: Methods of Teaching Physics: mechanics (Jeff Steinert, Javier Melendez PS-H356)

PHS 594/PHY494: Modeling Workshop in CASTLE Electricity (Rich McNamara, A Chapman H355)

CHM 594/CHM480: Modeling Instruction in Chemistry I (Mitch Sweet, Justin Sheets 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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* **Reserve a seat** for non-credit (clock hours) at <http://physics.asu.edu/node/2349>. **FREE! Flexible:** take all or part of workshop. You needn't apply to ASU. **Free** course materials for AZ teachers.

* Apply for our summer **tuition scholarships** at <https://physics.asu.edu/node/2350> (after Feb. 1).

* AZ teachers: want to qualify to teach dual enrollment? or prepare to become certified in physics or chemistry? apply for 3 **\$2000 scholarships** (1/yr), at <https://www.azed.gov/titlei/pd-pilot-program/> .

* MNS degree (if in Title I school): apply for \$17,500 Federal Direct **forgivable loan** & TEACH grant.

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". Also <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: see <https://modeling.asu.edu>

