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

For summer 2021, ASU offers a program of LIVE REMOTE courses for professional development.

These are ideal courses to meet re-certification requirements, qualify to teach Dual Enrollment/Adjunct two-year college (TYC), and become highly qualified in physics or chemistry. They can count towards the ASU interdisciplinary *Master of Natural Science* degree (MNS) in physics, & graduate degrees in education. TYC, CTE, and pre-service teachers find these courses useful, too. 3-dimensional learning!

Top priority to tuition-paying participants; 2nd priority for Arizona teachers who take for Continuing Ed.

* Apply after January 2021 for a partial tuition scholarship. We have funds for AZ teachers!:
  [http://physics.asu.edu/content/partial-tuition-scholarship-mnsmodeling-instruction-courses](http://physics.asu.edu/content/partial-tuition-scholarship-mnsmodeling-instruction-courses)

* or reserve a seat after Jan. for non-credit ($400; need not apply to ASU. $200 if out-of-pocket AZ)
  [http://physics.asu.edu/content/modeling-instruction-application-reserve-seat-ceu](http://physics.asu.edu/content/modeling-instruction-application-reserve-seat-ceu)

Modeling Instruction is designated as an *Exemplary K-12 science program & Promising Technology program* by the U.S. Department of Education. It is rated an *Accomplished STEM program* by Change the Equation. It won the "Excellence in Physics Education" award of the American Physical Society.

**Modeling Instruction LIVE REMOTE courses (assuming no Covid-19 vaccine yet):** (3 credits)

---

**June 7 to July 13 (Tuesday), 2021:** (Zoom meetings MTWThF 8:30 to 11 am, Arizona time)

**PHS 530/PHY 480:** Methods of Teaching Physics I: mechanics (Jeff Steinert, instructor)

**CHM 594/CHM 480:** Modeling Instruction in Chemistry I / Methods of Teaching Chemistry I (Mitch Sweet, instructor, & Justin Sheets, peer co-leader)

---

**June 7 to 25, 2021:** (Zoom meetings MTWThF 8 to 11 am, Arizona time)

**PHS 594/PHY 494:** Modeling Instruction in Waves & Sound OR Modeling Instruction in Light

**CHM 594:** Modeling Instruction in Chemistry II (2 credits)

Tentative: **PHS 505/CHM505:** Energy & the Environment (Cory Waxman, instructor)

---

**Other courses: June 28 to July 29, 2021**

**PHS 570:** Spacetime Physics (Mostly asynchronous. Some Zoom. 1–3:30pm MTWTh. Carl Covatto)

**PHS 581/CHM 581:** Structure of Matter (Zoom meetings 4-6:30pm MTWTh. Bob Culbertson)

**PHS 598:** Leadership Workshop (4 Fridays at 1:10. June 11 & 18, July 16 & 23. Jim Archambault. 1 cr)

Visit [http://physics.asu.edu](http://physics.asu.edu), hover on "Admission", scroll down to MNS Admission or Modeling Instruction Program. For information, visit [http://modeling.asu.edu](http://modeling.asu.edu) and click on *ASU Summer Graduate Program for Teachers of Physical Sciences*. For help with tuition scholarships or Continuing Ed, e-mail Jane.Jackson@asu.edu, 480-314-1522. If you want grad credit, apply to ASU as a nondegree summer 2021 grad student ($70 appl fee), at [http://admission.asu.edu/graduate/nondegree](http://admission.asu.edu/graduate/nondegree) -- no transcripts needed. Register for your course at least 1 week before course begins to avoid $50 late fee.