

A photograph showing a group of people in a workshop setting. In the foreground, a woman with long dark hair is leaning over a table, looking at a notebook. Another woman with long brown hair is sitting at the table, also looking at the notebook. The notebook has handwritten text and diagrams. The background shows other people and tables, suggesting a busy workshop environment.

Summer 2023 Workshop

Computational Modeling – Physics First

Ridley HS (near Philadelphia)

This course in physics for high school teachers integrates computational modeling and mechanics. It focuses on pedagogical content knowledge and skills needed to effectively teach basic mechanics. It emphasizes computational modeling through the use of Pyret language and the Bootstrap: Algebra approach developed for novice computing students. Computational ideas introduced include functional expressions, data types, and Boolean logic. These computing tools and approaches are embedded in the Modeling Method of Instruction, in which students develop scientific models. Course content includes Newton's laws, qualitative modeling of energy storage and transfer, momentum, and basic models in kinematics and dynamics (free particle, constantly accelerating particle).

JUL

10

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Jul

28

DAYS OF THE WEEK
M-Th 8:00 am - 3:00 pm
F 8:00 - 1200