



CARL WUNSCHÉ SR.  
HIGH SCHOOL  
A CAREER ACADEMY IN SPRING ISD

# Modeling Workshop in Mechanics

**June 11–28, 2012 | Carl Wunsche Sr High School**

Carl Wunsche Sr High School will host a Modeling Workshop from June 11–28, 2012 in physics lab 2618 of the Medical Tower. All high school math and science teachers can benefit from this training and are welcome to apply.

**Workshop leader: Nicholas Park**

**Co-leader: Maikel García**

## About the Workshop

Modeling Workshops provide a structured inquiry approach to high school science teaching that incorporates computer technology and insights from physics education research. Emphasis is placed on the use of basic models and modeling in mechanics. Participants develop skills in fostering scientific discourse among students and in the assessment of student learning.

This 3-week workshop will run Monday thru Thursday from 8:00-4:30 for 12 days, and will be divided into three 1-week segments. Teachers may register for each segment independently, but they must be taken in sequence.

Week 1: Introduction to Modeling and Kinematics

Week 2: Dynamics and Projectile Motion

Week 3: Energy, Momentum and Circular Motion

In addition, participants will be provided with detailed materials to help them apply the modeling method in other areas of the first-year physics curriculum, including electricity, mechanical waves and light, as well as physical science and chemistry.

Each participant will design and carry out a series of investigations that use the Modeling Method. They will practice Socratic questioning techniques that will enable them to teach physics using the Modeling Method. Each participant will also keep a daily journal book of problems solved, labs done, personal notes and reactions to activities and readings, and expected student difficulties with ways to address them. More information about Modeling Instruction can be found at <http://modeling.asu.edu>.

## Objectives of the Modeling Workshop:

- To train teachers in the use of a model-centered, constructivist method of teaching while at the same time improve their content knowledge in mechanics.
- To integrate computer courseware effectively into the science curriculum.
- To establish electronic network support and a learning community among participants.
- To help participants to make better use of national resources for science education.
- To strengthen local institutional support for participants as school leaders in disseminating standards-based reform in science education.

## Modeling Workshop Registration

**Name:** \_\_\_\_\_

**School District:** \_\_\_\_\_

**School:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Courses and Grade Levels Currently Teaching:**

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**Registration Fees:\***

- **\$375 for 1 week**
- **\$515 for 2 weeks**
- **\$595 for 3 weeks**

Federal Title II funds can be used; and possibly Title I funds. Ask your principal. For information, see [http://modeling.asu.edu/MW\\_nation.html](http://modeling.asu.edu/MW_nation.html).

We are also applying to local corporations for funding. If approved, more resources will be provided to participants.

\*Spring ISD teachers are fully covered by the district, but must still submit this registration form to be officially accepted into the workshop.

Make check payable to Spring ISD. Please send your registration form and check by May 21st, 2012.

Mail checks and registration forms to:

**Carl Wunsch Sr High School**  
**c/o Michelle Davila**  
**900 Wunsch Loop**  
**Spring, TX 77373**



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