

## WM10 Commercial Workshop List

### **CW01 And You Thought It Was About Homework: The Way you Imagined Teaching could be.**

*Sponsor:* **WebAssign**

*Date:* Tuesday, Feb. 16

*Time:* 12:33 PM - 1:30 PM

*Room:* Washington 3

*Leaders:* John Risley

Help your students learn with WebAssign. Find out what's new. WebAssign, the premier independent online homework, quizzing, and testing system, is proud to debut our new program designed to support your laboratory needs.

This workshop will include an overview of WebAssign, teaching you how to access and assign questions from all major physics and astronomy textbooks, or write your own. You'll learn more about new assignable simulations, assignable examples with content specific hints and feedback, more online components and tutorials--all specific to your textbook. Give partial credit with conditional weighting. Assign practice questions. Give group assignments. Select questions for your assignments knowing how difficult each question is and how many students have tried it before.

We will then introduce you to WebAssignLabs, our innovative approach to help you prepare your students for the lab experience, collect their lab data, analysis, and reports--all using WebAssign.

WebAssign novices and WebAssign experts (and all those in-between) will learn something new and exciting in this workshop.

Over 3 million students have successfully used WebAssign. Find out why.

### **CW02 Optics with Lights & Color: Bright Ideas**

*Sponsor:* **CPO Science**

*Date:* Monday, Feb. 15

*Time:* 10:45 AM - 12:33 PM

*Room:* Nathan Hale

*Leaders:* Erik Benton

CPO Science's new Optics with Light & Color kit comes with LED flashlights, a laser, convex and concave lenses, a prism, diffraction grating glasses, polarizing filters, and more. Mix colors of light, learn about human vision, measure angles of reflection and refraction, create interference patterns, calculate wavelengths of light, and experience total internal reflection with a laser and prism. We'll touch on current technological applications of these topics as we use hands-on equipment to study the time honored properties of optics, light, and color in new ways.

### **CW03    Introductory Physics for the 21st Century**

*Sponsor:    **John Wiley & Sons***

*Date:        Monday, Feb. 15*

*Time:        12:33 PM - 1:30 PM*

*Room:       Park Tower 8210*

*Leaders:*

John Wiley & Sons is pleased to announce the release of the third edition of Matter & Interactions by Ruth Chabay and Bruce Sherwood.

This two-semester, calculus-based physics course offers students a remarkably coherent introduction to mechanics, thermal physics and electricity and magnetism by integrating elements of contemporary physics, including the atomic structure of matter, and by emphasizing the use of fundamental physics principles to construct models of physical systems that predict or explain their structure or behavior.

This workshop will discuss many of the most striking and effective features of this curriculum. It will also present the positive experiences of faculty at the growing number large research universities that are using Matter & Interactions to teach introductory physics to all of their engineering and science students. The workshop leader is a professor of physics at Purdue University, one of the institutions using Matter & Interactions in this way.

### **CW04    Physics2000 Workshop**

*Sponsor:    **Physics2000.com***

*Date:        Tuesday, Feb. 16*

*Time:        11:30 AM - 1:30 PM*

*Room:       Balcony D*

*Leaders:    Elisha Higgins*

Come to the popular Physics2000 workshop where we show you how to teach special relativity in the first week of an introductory physics course, and then how to fit 20th and 21st century physics into your course. We also show you how to introduce Fourier analysis using the free MacScope audio oscilloscope program (that works on Macs and Windows), ending up with an intuitive explanation of the time-energy form of the uncertainty principle. This approach is followed in the new non-calculus version of the Physics2000 text, as well as the calculus version that we introduced in January 2000.

## **CW05 Physics for Everyday Thinking (PET) and Physical Science for Everyday Thinking (PSET)**

*Sponsor: **It's About Time***

*Date: Monday, Feb. 15*

*Time: 12:33 PM - 1:30 PM*

*Room: Balcony D*

*Leaders: Fred Goldberg*

PET and PSET are one-semester guided inquiry courses for prospective and practicing elementary and middle school teachers and general education college students. These courses focus on the themes of interactions conservation of energy, Newton's Law and (for PSET) atomic-molecular theory. They include Learning About Learning activities where students either reflect on their own learning, the learning of younger children (using elementary videos), or the learning of scientists (the history of nature of science).