

Kent State University and the Northeast Ohio Center of Excellence for Mathematics and Science Teacher Education present:

Physics 50195 Special Topics in Physics (2 credits):

Experiencing the Foundations of Physics: Addressing Academic Content Standards with an Inquiry-Based Approach

July 11 - 15, 2005

Two graduate credits awarded in physics. A scholarship to cover all tuition and materials provided plus \$400*.

* These funds will cover minor university fees and can be used at your discretion to support your teaching.

The workshop will focus on core and contemporary topics in physics providing participants with hands-on engagement with the learning process and an opportunity for transforming their teaching styles for their own classes. Class activities will be carried out in a "studio-physics" environment, (inquiry-based learning, lab exercises and collaborative project work in a single setting).

Intended Audience: Middle School Science Teachers.

(High School teachers seeking to advance skills in inquiry based learning also welcome.)

The course will address the topics of physics identified by the National and Ohio Science Standards in:

- Electricity, from charge to circuits
- Motion, Newton's Laws and Predictability in Nature
- Energy and Conservation Laws
- Waves, Light, Lenses and Optics
- Measurement and Experimental Methods

Materials used in this course have been developed by local science teachers and faculty in physics and education from The University of Akron, Cleveland State University, and Kent State University.

Instruction will utilize methods and techniques to model teaching with inquiry as a means to convey methods in scientific research and to improve student learning.

<u>Class size is limited</u>. To enroll, prospective participants must complete a graduate application and a tuition scholarship form for Kent State University. Completed applications should be sent to Dr. Michael Lee, Department of Physics, Kent State University, Kent, OH 44242. For more information, call Prof. Lee, 330-672-2577 or e-mail, <u>mlee1@kent.edu</u> or visit the web site http://physics.kent.edu/neocex.

Workshop information, application forms and tuition scholarship forms are available on the Department of Physics website at http://physics.kent.edu/neocex