



September 15, 2003

The Ohio State University
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Dear Colleagues:

The Ohio State University Department of Physics is giving a new course *Energy and Technology*, Physics 670. The call number 20440-8 will be offered Autumn Quarter 2003. The class meets on Saturdays from 9:00 to 3:00 pm with a one-hour break. This course is designed to address the Ohio Technology Academic Content Standards for Math, Science and Technology (MSaT). The clientele will be in-service teachers and pre-education majors.

The topics to be covered in the first quarter of Physics 670 includes mechanics, Newton's laws, forces and simple machines, energy, work and power, exponential growth, electricity and magnetism, simple circuits, and electrical safety. The second quarter, which will be offered in Winter, 2004, will cover the topics the electromagnetic spectrum, thermal energy, chemical energy, nuclear energy, energy efficiency and the impact of energy use on the environment. The course is designed as a hands-on, discovery-style lab, in a cooperative learning environment. We have found that this construction is an effective way to understand the physics concepts.

Each Saturday course starts with a two-hour lab/discussion section followed by a one-hour lecture then a break for lunch. The course picks up in the afternoon with a second two-hour lab/discussion section. The course grade is based on a combination of assignments, in-class work, 2 midterm exams and a final exam, a term paper and/or a lesson plan incorporating some of the ideas learned in the course into a unit which could be used in the teacher's own classroom.

We are very excited and we hope that you or your colleagues will be able to benefit from our course. Please spread the word far and wide, that is what our flyer is for.

If you have any questions send us e-mail or call Bunny Clark.

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