Welcome to the 20XX Physics and Physical Science Institute for Teachers.

Staff

Professor XX, is in overall charge of the Summer Institute. Members of the instructional team also include XXX, XXX, and XXX.

Administrative matters (registration, payment of fees, stipend, etc.) should be referred to XXX.

Hours

Class meets XX through XX from X:00 A.M. to X:00 P.M. with a break for lunch, usually from 12:00 P.M. to 1:00 P.M. During the Institute there are brown-bag lunchtime discussions scheduled on Tuesdays that you should plan to attend. The midterm and final exams will be given on xx and xx. There are no designated breaks during the morning or afternoon sessions, but groups may take a short break when convenient.

The work in this course is very intensive. Because of the nature and style of the activities, it will be extremely difficult to make up time that you miss. It will also be difficult for your partners to make progress in your absence. You are therefore expected to attend all class meetings. In the event of an emergency, please call XXX at (XXX) XXX-XXXX as soon as possible.

Topics

Participants will study three different topics over the course of the summer. The selection depends on grade level, subjects taught by participants, and topics studied in previous Summer Institutes. The 2012 Summer Institute topics will include XXX, XXX and XXX.

Curriculum

Class hours will be spent working through curriculum as described in the preface to Physics by Inquiry. You should keep a written record of your work in a 3-ring notebook. Your notes, together with Physics by Inquiry, constitute the text for this course. Certain key experiments and exercises are designated as “checkouts.” You should discuss the relevant issues with your partners and prepare a written response before asking to be checked out by a staff member. Indicate your readiness by placing your name on the blackboard. After discussing the material with your group, a staff member will indicate if you are ready to proceed or if you could benefit from spending additional time on the material.

Partners

You will be working with various partners during class. It is important that partners actively discuss their work rather than function as isolated individuals. In order to have a variety of experiences, you should work with different partners for each topic.

Written assignments and examinations

A great deal of emphasis is placed on written discussions of the concepts you are learning and careful explanations of the reasoning through which you arrive at conclusions. Three written homework assignments, one paper assignment, and two exams will be given. These components of the course provide an opportunity for you to synthesize and articulate your understanding of the concepts developed during the Institute. The homework and paper will be based on your work in class and should not require outside research. During exams, you will be able to refer to Physics by Inquiry and your notebook.
Pretests
Pretests may be given prior to certain sections of the modules. They are intended to help focus your attention on important issues that will be addressed in subsequent sections.

Materials
In addition to a copy of Physics by Inquiry, you will need the following:

• a 3-ring, 2" binder in which to keep your notes (along with a supply of loose-leaf paper)
• a clear plastic 12" ruler with a centimeter and an inch scale
• a protractor
• a calculator
• graph paper with 5 squares to the inch.

All laboratory equipment referenced in the curriculum will be available in the classrooms.

Lab safety
Most of the experiments in Physics by Inquiry do not require special protective equipment. However, please exercise appropriate caution at all times. When instructed, use protective eyewear and ensure that others in your area are not placed at risk.