AP Environmental Science: Overview/Expectations

This course is designed to prepare new and relatively inexperienced teachers for the AP Environmental Science course. Because this interdisciplinary course incorporates elements from biology, chemistry, geography, geology, and natural resource management, the laboratory component of the workshop will focus on how to complement and integrate these important environmental concepts into the course through appropriate laboratory and field investigations. Our diverse field investigations will stress analysis through first-hand studies of local ecosystems, forestry management, water quality analysis, bioassays, and soil analysis.

We will also address many basic course elements such as an overview of the curriculum, setting up the course with the necessary field/lab equipment, student selection, field trip planning, teaching/testing pacing, the role of the laboratory, and the importance of independent lab/field research projects. The latest APES exam will be discussed, with focus on student essay writing and grading.

All participants should come prepared for field work, with jeans, T-shirts, field shoes and rain jacket the typical lab/field wear. Since all lab work will require subsequent data analysis, a calculator, graph paper, colored pencils, and lab notebook will be necessary. Participants will also need to bring their 2008 school calendar, and an APES text.

Each participant will refine/develop a syllabus appropriate to their school’s schedule and calendar in support of the AP Audit requirements. Finally, please bring an activity that you would like to share with the group. Looking forward to seeing you!

Course Requirements and Evaluation
It is expected that each participant will:

1) Prepare/refine a preliminary Course Syllabus which takes into consideration participant’s school calendar and daily schedule,
2) keep a Workshop Lab Notebook (organized to meet the participant’s needs), collecting lab/field data and analyses of all field work competed during the course of the week.
3) Complete a formal lab write-up/analysis of one of the labs done in class.

Methodology: Lecture, small-group discussion and lab/field work, with subsequent data analysis, will be a part of each day.
Course Schedule

** Exact scheduling of field work tentative, depending on weather and field conditions. All final field schedules will be reconfirmed the day before.**

Tuesday, Day 1

Teacher Intros, Introduction to the AP Program/APES specifically;
   - Equity Policy Statement; recent updates to APES;
   - overview/plans/goals for Workshop

I. APES Course Outline and Objectives
II. Pre-requisites and student selection criteria
III. Textbook selection: Evaluating current texts
IV. Planning for a Successful APES Course:
   A. Scheduling and Pacing: how long to devote to each of the topic areas:
      Sample syllabi.
   B. Techniques, strategies, and suggestions for teaching this course.
   C. Overview of laboratory work, field investigations, and demonstrations.
   D. Grading: exams, quizzes, homework, lab reports, presentations, projects, and other assignments.
V. An Introduction to AP Environmental Essay Writing and Evaluation
VI. An Introduction to the APES Lab: Bioassay work

Wednesday, Day 2

I. Materials/equipment necessary for a successful APES course
II. Laboratory and field work continued...
III. Lab manuals/sources of experiments
IV. Videos and software
V. Role of Independent Field Research Projects

Thursday, Day 3

I. Laboratory and field work continues...
II. Field Trips: Planning for Effective Field Trips, Field Trip Safety Contracts
III. APES Essay work continues...
IV. Video samples/titles
Friday, Day 4

I. Completion and Summary of all lab work...
II. Spring Preparation for the APES Exam
III. The 2008 APES Exam
IV. The “FRQ Assignment”: What contributes to student success on the APES Exam?
V. Share-A-Thon
VI. Closure and Evaluation