Explorations in Science
Unit C: Heat, Temperature and Cloud Formation

APROXIMATE COURSE SCHEDULE USED FOR 1/2 SEMESTER AT DICKINSON COLLEGE 2002

Class met twice weekly for 2 hr 30 min (though we recommend three times weekly for 1 hr 50 min)

Unit D: Heat, Temperature, and Cloud Formation

Day 1	Sections 0 & 1: Experimenting & Hypothesizing (HW Set 0)
Day 2	Section 2: The Distinction between Heat& Temperature (HW Set 1)
Day 3	Section 2: Finish Section (HW Set 2)
Day 4	Section 3: Evaporation, Condensation & Humidity (HW Set 3)
Day 4	Section 3: Finish Section (HW Set 4)
Day 5	Section 4: Cloud Formation
Day 6	Unit 2 Heat Exam (HW Set 5: submit a project idea & rate suggested projects
Day 7	Begin Projects
Day 8	Projects
Day 9	Projects
Day 10	Projects
Day 11	Projects
Day 12	Project Presentations!
Several Days later	**Individual Project Paper Due**

USING THE ACTIVITY GUIDE IN OTHER INSTRUCTIONAL SETTINGS

Explorations in Physics was originally designed to be used with relatively small classes in a Workshop/Studio setting that combines laboratory and computer activities with discussions. The materials were tested and refined over a 7-year period at Dickinson College, Santa Clara University, and Rochester Institute of Technology. The schedule for *EiP* courses was different at each of these institutions, and the number of topics covered and the balance between guided inquiry and projects had to be adjusted accordingly. Some common implementations are described in Table 1. In most cases, the suggested schedules also allow extra days for exams, review sessions, and oral project presentations.

Academic Calendar	Class Schedule	Guided Inquiry	Student Projects
Semester	3 hrs/week	1 Unit	1 Full Project
	6 hrs/week	2 Unit	2 Full Projects
Quarter	3 hrs/week	1 Unit	1 Shortened Project
	6 hrs/week	2 Unit	1 Full Project

Table 1: Common implementation schedules for core materials and projects

We recognize that not all institutions have the resources to provide a Workshop learning environment in which lectures and labs are combined. As outlined below, these materials can also be adapted for use in more traditionally structured classes.

Traditional Lecture Sessions: It is possible to incorporate individual activities into lectures as demonstrations, similar to Interactive Lecture Demonstrations developed by David Sokoloff and Ronald Thornton. In these demonstrations, students record their predictions, discuss them with fellow students, and then watch as the instructor performs an experiment. Questions in the activity guide lead students to reconcile their predictions and observations.

Traditional Lecture Sessions with Laboratory: In cases where a complete unit is introduced into a traditionally scheduled course, the labs and lectures can be coordinated so students can work through the unit in sequence with some activities being done as interactive lecture demonstrations and others as laboratory exercises.