

**The Fleet - UCSD - SDCC Independent Study of Electricity and Magnetism
Fall 2001**

Class Title: 'The Coolest Physics Class Ever'

Class Instructor: Dr. Murugesan

Meeting Time: Wednesdays 4:00p-5:30p (tentative)

Instructor's Office: M210 City College

Location: The Science Center Board Room/Galleries

Office Hours: 10:30a-11:30a M-Th

Contacts:

Dr. Puvan Murugesan

Dr. Noah Finkelstein

David Evers

UCSD Grad Students

858 534 7198

238.1233 x850

ask 'em

Principal Instructor for the class

UCSD contact (nfinkels@ucsd.edu)

Interpreter Supervisor (Fleet contact)

A bunch of students to run the class

Schedule:

Week 1 (9/5): Static Charge—Jim

Week 2 (9/12): Electricity—Dr. Noah

Week 3 (9/19): Circuit components—Ed

Week 4 (9/26): Magnets & fields—Omar

Week 5 (10/3): Induction/Generators—Shane

Week 6 (10/7): Waves—Jonathan

Week 7 (10/17): E/M waves and Spectrum—Brian

Begin to think about your project

Solid Project idea - proposals due

Week 8 (10/24): *Really start working on your project - Full outlines due*

Week 9 (10/31):

Week 10 (11/7):

Week 11 (11/14):

Week 12 (11/21): *Rough draft of project due*

Week 13 (11/28):

Week 14 (12/5): *Final Project due (including presentation)*

About the Class:

'The Coolest Physics Class Ever' is offered to a select few students attending City College. You five will embark on an amazing journey through electricity, magnetism, and waves while using the Science Center as your textbook. This class serves to cover these topics while promoting the concepts and intuition (or lack of intuition) that lie beneath them. Any questions you have regarding the class or the content can be directed towards the people under the 'Contacts' list.

The class will meet once a week at the Science Center. The first half of the class (Weeks 1-7) will be comprised of workshops wherein a graduate student from UCSD will teach a designated topic. The second half of the course (Weeks 8-14) will have the students create a final project based on their interests from the workshops.

This class is designed to be rewarding and fun. The outcome, however, will largely depend upon your participation.

Resources:

You have an ENORMOUS number of resources at your disposal. Take advantage of them. In addition to two faculty members (SDCC and UCSD), six graduate students and David E. will help guide you through the class. If you are stuck on a topic, troubled by homework, or curious about the projects talk to one of us. As will be discussed in class, student projects (individual or group) will be guided by one of the graduate instructors. You will do the work, but they will serve to help you answer questions, obtain materials, etc.

Grading:

'The Coolest Physics Class Ever' is graded pass/no pass and is worth 1 or 2 units of credit at City College. Your grade will be based on the following criteria (keep in mind giving David cookies will help)...

Attendance	10%
Homework	20%
Participation	30%
Final Project	40%

Attendance is necessary for any class, and this one is no different. If you miss more than two workshops, you will not pass the class. If you **MUST** be absent, notify David E. who will coordinate make-up information / work. *Homework* will be assigned after each workshop on Wednesday. It will be due by 3:00p on the following Monday at the Science Center. You should plan to scan your homework so that it may be sent electronically to UCSD. It will, then, be returned to you by the next workshop. Your *participation* in the workshops and with your final projects are key to this course. You should plan on coming to each workshop ready to participate and discuss the wonderful world of science. More information will be given to you regarding the *final project*, but know that the last half of the class will be devoted to creating some project (a research paper, a model or other demo, etc.). This project will be based on some aspect of the class and the exhibits in the Science Center.

Weekly you should stop in to see Dr. Murugesan during one of his office hours. Ask questions, report progress, or simply say hello.

Note:

The time you spend in the Science Center taking the class (ie. Workshops/Homework) should NOT count toward your community service hours for the Price Scholarship.