

# Basic Web Programming

Student Taught Course, spring 2010

**Student Instructors:** Giordon Stark (sophomore, Physics) and Brian Merlob (sophomore, Political Science)

**Sponsoring Professor:** Mani Chandy

## Course Description:

Being able to build and maintain a website has become an increasingly useful skill. This course will introduce the HTML layout and address how to structure pages with CSS, and how to program in PHP. Using Ajax, students will learn how to make a well-designed interactive website for the Google Chrome and Mozilla Firefox browsers. To pass the course, students will need to complete several short assignments to demonstrate their ability to create websites and make significant progress on one large project in the last few weeks. Each assignment will have a challenge question requiring analytic thought and the final project should display a greater understanding of the concepts covered. The class will take about 3 hours each week, with an hour and a half of lecturing for the first five weeks reduced to an hour for weeks 6, 7 and 8. The remaining time will be spent working on the assignments. The last two weeks will be dedicated to designing and developing a well-designed interactive website on the student's IMSS account.

The class is geared towards anyone who would like to learn how to build a website. There are no prerequisites, but previous programming experience (such as CS 1 or equivalent) is recommended. Class size will be limited to 20 students.

## Topics by week:

1. HTML: Learning the (Tabled) Layout
2. CSS: Styles & Syntax
3. Fun CSS Tricks
4. Advanced CSS: (Layered) Display & Presentation
5. PHP: Eloping with [www.php.net](http://www.php.net)
6. PHP: Going Dynamic
7. More PHP: Cool Tidbits
8. Even More PHP: Becoming Synchronized Using AJAX
9. Project Design (w/ Guest Lecturer on Google App Engine)
10. Project Development

## Instructors:

Giordon Stark would be the instructor for the class and would be ultimately responsible for formulation of the assignments and lessons, as well as teaching the class. Giordon is self-taught in web programming, with more than six years of experience, and can program in HTML, CSS, Javascript, PHP, MySQL, AJAX, DHTML, and XHTML. He has worked on several projects (such as Neopets and Teripets), dealing with frameworks, security, and database management and optimization. He has been a Health and Safety Instructor (instructing for over 9000 hours) with the American Red Cross in teaching classes such as: CPR/First Aid/AED,

Basic Aid Training, HIV/AIDS Peer Education and Basic Instructor Training, where the size varied from 3 students to 100 students.

Brian Merlob would be involved in the specific formulation of the assignments and lessons (as a test subject), and would be responsible for monitoring each student's progress in the course, notifying the sponsor of the course's status, and otherwise aiding Giordon as an assistant.