Course Number: 307  
Course Name: Applied Systems Programming  
Course Credits: 3  
Schedule: Fall, Spring  
Syllabus Date: Spring 2007  
Prepared By: Tim Margush

Prerequisites: 3460:210 with C- or better


Bulletin Description: Overview of current programming languages, tools and scripting technologies for the Internet and World Wide Web.

Detailed Description: An introduction to Web-based and Internet programming. Topics may vary, but typically include HTML, XML, CSS, CGI, Perl, PHP, and/or JavaScript.

Course Goals: Understand basic HTML concepts, including CSS, forms, client-side scripting, and DHTML. Understand the basic concepts of WWW client-server communications and be able to create CGI applications to support form processing. Know what XML is and how it can be used. Learn to develop applets and basic socket level communications in Java.

Topics:

1. Internet Basics  
2. HTML and XHTML, Forms  
3. CSS  
4. JavaScript, form programming, and DHTML  
5. XML  
6. CGI and Perl  
7. PHP  
8. MySQL  
9. Ajax

Computer Usage: Students use a Linux platform to publish web pages and develop CGI scripts in Perl and PHP. Javascript programs are developed on any convenient platform. Students use telnet and ftp clients.

References:

- W3C web site: [www.w3.org](http://www.w3.org)  
- The 'Official' PERL Site: [www.perl.com](http://www.perl.com)  
- Java SDK [http://java.sun.com](http://java.sun.com)