

<b>Course Number</b>	<b>CS 221</b>	<b>Course Title</b>	<b>Introduction to Internet and Mobile Computing</b>			
<b>Semester Hours</b>	<b>4</b>	<b>Course Coordinator</b>	<b>S M Nahian Al Sunny</b>			
<b>Catalog Description</b> FA24	As a preparation course for students to prepare for higher level core curricula, this course provides a comprehensive introduction to a broad range of fundamental computer system concepts and principles. Coverage includes fundamentals of network, internet, and world-wide-web; client-side web application development; core Linux/Unix systems concepts and tools used for server-side applications; and Android App development.					
<b>Textbooks</b>						
None, all instructional material is available online.						
<b>References</b>						
<b>Course Learning Outcomes</b>						
<ul style="list-style-type: none"> <li>• Providing students with an introduction to web application development using HTML/CSS/JavaScript and Linux as a major server-side operating system.</li> <li>• Introducing students to mobile device application development.</li> <li>• Improving students' familiarity with the practical elements of software development, which should improve their programming skills for all higher level courses and their future careers.</li> </ul>						
<b>Assessment of the Contribution to Student Outcomes</b>						
<b>Outcome →</b>	1	2	3	4	5	6
<b>Assessed →</b>	X	X				X
<b>Prerequisites by Topic</b>						
CS 202 with grade of C or better.						

**Major Topics Covered in the Course**

1. Introduction to internet computing
  - How the web works
  - Client-server architecture
2. Introduction to web development
  - HTML – Basic elements, tables, forms, multimedia etc.
  - CSS – Styling formats, selectors, classes, common properties
  - JavaScript – variables, functions, accessing and manipulating HTML/CSS elements
3. Introduction to the Linux/Unix environment
  - Software installation and management
  - Linux command line and frequently used commands
  - Basic shell scripting
  - Editors: Emacs, Vi, etc.
4. Android Application Development
  - Android platform architecture and Software Development Kit (SDK)
  - Using GUIs and custom views
  - Integrating content provider connections
  - Understand bound and unbound services
  - Notification, alarms, and camera services
  - Accessing and managing Internet resources and web services