

## COURSE MASTER SYLLABUS

Date	February 29, 2008
Course Prefix and Number:	MIS 565
Course Title:	Web Server and Internet Telecommunications Technology
Instructor(s):	Hartono
Typical Textbook:	Syngress, <u>Network &amp; Certification</u> , McGraw Hill Book Co., 1999.
Catalog Description:	Examines the Internet telecommunications technologies required to implement, manage, and maintain an organization's web site. Topics include: TCP/IP; IP addressing; subnet masks; routers, configuration and maintenance of web and DNS servers; and security issues. <i>Prerequisites: MIS 301.</i>
Course Objectives:	To link theory and practice by providing examples that are common to real-world business related web server and TCP/IP configuration issues. To provide the student with an understanding of how to design and implement a TCP/IP network to conduct electronic commerce transactions. The specific course objectives are that by the end of the course, students will have acquired the skills to design, implement, test, and debug a fully functional web server and TCP/IP network connected to the Internet.

Subject Matter: 28 sessions at 80 minutes each plus a final exam

<u>Topic Number</u>	<u>Topic Title</u>	<u>Number of Sessions on Topic</u>
1.	Introduction to Network Computing	1
2.	Networking Media and Hardware	2
3.	Networking Standards, Protocols, and Access Methods	2
4.	Network Adapter Cards and Drivers	1
5.	Network Topologies	1
6.	OSI and IEEE 802 Networking Models	2
7.	TCP/IP Protocols and Utilities	1
8.	Classes of IP addresses & IP Addressing Schema	2
9.	Subnetting and Subnet Masks	3
10.	Dynamic and Static Routing	1
11.	Address Resolution & Domain Name Servers	2
12.	Troubleshooting TCP/IP & Performance Monitoring	2
13.	Web Server Configuration: WWW & FTP	2
14.	Virtual Servers and Directories	2
15.	Web Server Security & Secure Socket Layers	2
16.	Index Server & Server Log Files	2

**Active Student****Involvement:**

Each student is required to develop a Web application(s) that applies certain programming concepts. At the end of the semester, each student is required to develop a relatively sophisticated Web application(s) that applies most of the programming concepts that he/she has learned throughout the semester. Examples of these applications are Web-based chatting room, Web-based address book, Web-based e-commerce applications (e.g., Web-based product catalog, Web-based order application).

**Collaborative Learning****Experiences:**

Students are required to complete a group project on installing and configuring Web server (in this class we use an open-source Web server Apache).

Describe how the course addresses the following topics or state that it does not:

- Global Business Environment: Global nature of the Internet.
- Ethics: Privacy and security issues relating to web servers and hackers.