

Course Information

Course Prefix/Number:	IST 227
Course Title:	Internet Operations and Management
LectureHours/Week:	3.0
LabHours/Week:	0.0
Hours/Semester:	3.0

DL ATTENDANCE/VA CERTIFICATION **TEXTBOOK INFORMATION**

Course Description: This course covers the duties and responsibilities of an Internet web master, appropriate hardware, software, and telecommunications technology, designing, implementing and maintaining a web site, and utilizing security mechanisms.

Course Competencies:

Upon successful completion of this course, the student should be competent to perform the following tasks:

Module 1 - Web Server Administration

- Understand client/server concepts
- Describe the basic functionality of Web Servers and browsers
- Understand the basics of hypertext documents and the difference between ASCII and Binary files
- Identify the parts of an HTTP transaction, request, headers, and server responses
- Understand proxy servers and other Web related services
- Understand the concepts behind hosting a site, and hosting a server.
- Identify the differences between various Internet server operating systems
- Understand how to spot and resolve performance problems
- Register a domain
- Understand the roles and responsibilities of a system administrator
- Understand the document hierarchy on a Web server
- Configure a server
- Understand server-side programming, including Common Gateway Interface, ServerSide Includes, ASP, and Java Server Pages
- Understand Log Files and how to use them effectively
- Understand search engines and how to publicize a site

Module 2 – Web Security

- Understand the need for security
- Know types of attacks and vulnerabilities
- Use a packet sniffer
- Understand the need for and implementation of firewalls and proxies
- Understand Web server security
- Avoid CGI risks
- Understand Java Applets, ActiveX, JavaScript, and cookies
- Know how to provide secure online transactions
- Understand how to detect an attack and recover from it

Module 3 – Project

- Demonstrate the ability to install and configure Apache server to specifications provided by the instructor.
- Demonstrate the ability to install and configure IIS to specifications provided by the instructor.
- Develop a web site and publish the web site to an Intranet within the computer lab.

Methods of Instruction

- The instructor will explain content-related concepts through lectures and provide learning activities and assignments for students to further their understanding of the concepts. The student will be expected to read the textbook as assigned. Students should expect to spend time outside the class period as well as time provided during class to complete learning activities and assignments. In addition, students should plan to participate in class discussions to increase their understanding of the content. Should a student need additional assistance, a tutor will be available.

Course Requirements

All students are responsible for attaining competencies through completion of the following course requirements:

- participating in class discussions
- reading assigned material
- completing assigned learning activities
- completing assigned assignments
- completing all tests

Attendance

The attendance policy in the York Technical College Handbook will be followed.

Students taking this course in an online format must log in to the course, read lectures, and participate on a regular basis to fulfill the attendance requirements.

Academic Integrity

The student is bound by the policies stated in the York Technical College Catalog and Handbook. A student violating these policies will be subject to academic discipline.

Evaluation Strategies and Grading

Grades will be based on the average of the three module assessments.

The following scale will be the standard:

Score:	Grade:
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
<60	F

Final Grade:

Module 1 Assessment		% Module Grade	Course Grade
Hands-on Test 1	100	30%	33.3%
Hands-on Test 2	100	30%	
Theory Test 1	100	40%	
Module Grade		100%	
Module 2 Assessment			
Hands-on Test 1	100	30%	33.33%
Hands-on Test 2	100	30%	
Theory Test 1	100	40%	
Module Grade		100%	
Module 3 Assessment			
Project	100	100%	33.34%
Final Grade			100%

Topic/Content Outline

Module 1
Module 2
Module 3

Prerequisites Co-

Requisites

Required Course Materials

Textbook: see bookstore for current selection.