

William Paterson University
College of Science and Health - Department of Computer Science

Fall 2015 – Spring 2017 Assessment Cycle
Analysis of the Course Coverage and Assessment Report Data

Course Number: CS3380

Course Coordination Committee Members: Erh-Wen Hu, John Najarian, Gilbert Ndjatou (chair)

Date: May 26, 2017

A. Course Prerequisites/Co-requisites

- a) **Problems/Issues Identified:** None
- b) **Suggestions for Improvement:** N/A

B. Course Objectives

- a) **Problems/Issues Identified:** None

As cited under Course Content (below), we should remove the NetCentric component's Course Objectives, specifically the HTML5, CSS, and JavaScript.

- b) **Suggestions for Improvement:** N/A

C. Course Student Learning Outcomes

- a) **Problems/Issues Identified:** None

We need to reduce the Learning Outcomes. Remove the Web-oriented Net-Centric Components. Replace it with Security.

- b) **Suggestions for Improvement:** N/A

D. Course Content

- a) **Problems/Issues Identified:** None

We need to remove the HTML and JavaScript components. They are not necessary and can be covered as needed in the context of other courses (very likely as skills). Since we have a course covering HTML and JavaScript (CS 2100), this coverage is redundant.

The ACM recognizes the importance of Network Security and based on their current iteration of Curriculum guidelines and strong student interest in Security, we need to replace the Net-Centric component (basically web-page publishing) with Security. This also reflects the National crises in Cyber Security, a expanding role of Security in the industry (and job market), and the growing academic interest in this vital area.

b) Suggestions for Improvement: N/A

We should consider adding 1 credit to make the course 4 credits so we can have a comprehensive coverage with many labs and practical/active pedagogical labs and homework assignments.

E. Assessment of the CS Program's Student Outcomes

Student Outcome S9:

Demonstrate an Understanding of Computer Systems and their Networking.

Students are introduced to the fundamentals of networking in this class.

F. Analysis of the Course's Student Outcomes Assessment Data

Some few student outcomes were not assessed. But those that were assessed are for the most part very satisfactory.

G. Assessment of the Course Student Outcomes

Course: CS 3380: Networking Fundamentals and NetCentric Computing

Instructor: John P. Najarian

Semester: Fall 2016

	Learning Outcomes	Where Measured	Percentage of Satisfactory Results*
1	Define, identify, explain, and deploy a broad spectrum of components and aspects of computer networking at the conceptual, methodological, and practical level.	Semester Grades	80%
2	Understand the basics of protocols for computer networking, OSI layers, and TCP/IP.	Quizzes	88%
3	Understand the basic principles and operations of routers, switches, and other device	Quizzes	88%
4	Apply in Web-based environments, both wired and wireless.	Quizzes	88%
5	Understand and program in HTML5 and some of its API's	Labs	100%
6	Have a rudimentary appreciation for CSS and apply it in simple contexts	Not covered	NA
7	Understand and program in JavaScript	Homework	84%
8	Understand and program the basics of AJAX, (to a lesser extent)	Not covered	NA
9	Understand and program basic Java web page applets	Not covered	NA
10	Understand and design small applications for mobile / cell-phone computing environments	Not covered	NA
11	Understand and familiarize in current Web 2.0 and social networking realms	Not covered	NA
12	Install, work with, and contrast Java IDE's such as Netbeans, Studio-1, Eclipse, and, editors such as Notepad++.	Not covered	NA
13	Install, work with, and contrast several web browsers, especially with respect to their debugger facilities for JavaScript & other languages	Labs	100%
14	Introduce some JavaScript frameworks	Not covered	NA
15	Install, work with, and contrast several webpage editing environments such as Blue Griffon, Kompozer, Amaya, Alleycode, HTML-Kit...	Labs	100%
16	Explore web-based game development basics as an application area	Not covered	NA