

# **CS 103: Computer Science with Business Problems Syllabus, Fall 2009**

## **Instructor**

Prof. Marvin Nakayama  
Guttenberg Information Technologies Center, Room 4312  
Computer Science Department  
New Jersey Institute of Technology  
Newark, NJ 07102

Phone: (973) 596-3398  
e-mail: [marvin@njit.edu](mailto:marvin@njit.edu) (include "CS103" in the subject line)

Office hours: Monday and Thursday, 1:30-3:00, in my office. Also, you can see me by appointment or send me e-mail.

## **Description of Course**

The course will cover a range of topics in information technology (IT). Many students are already familiar with computers, the Internet and the World Wide Web, and this course will not cover those topics. Rather, students will gain fluency in IT, learning how to navigate independently in the ever-changing worlds of information and technology, to solve their problems on their own, and to be capable of fully applying the power of IT tools in the service of their personal and career goals. Specific topics we will cover include basic IT terminology, networking, HTML, algorithms, computer organization, Excel, databases, and Javascript.

**Course Webpage**                      <http://web.njit.edu/~marvin/cs103>

All of the course materials, including lecture notes and homework, will be posted on the CS 103 webpage. Much of the material will be in PDF, which will require that you have Adobe Acrobat or Acrobat Reader installed on your computer. You must bring your own printouts of the lecture notes to class. Be sure to check the course homepage everyday since I will post announcements on it.

## **Textbook**

Lawrence Snyder, Fluency with Information Technology: Skills, Concepts, and Capabilities, 3<sup>rd</sup> Edition, Addison-Wesley, 2007, ISBN 0-321-51239-1.

## Tentative Course Outline (by week)

Week	Topics	Reading (Chapter)	Important Dates
1	Defining Information Technology and Exploring the Human-Computer Interface	1, 2	
2	Basics of Networking	3	
3	HTML Primer	4	
4	Locating Information on the WWW	5	
5	Introduction to Debugging	7	Midterm 1 (10/2)
6	Representing Information Digitally	8	
7	Implications of IT	12	
8	Privacy and Digital Security	13	
9	Spreadsheets	14, 15	Midterm 2 (10/30)
10	Databases	16	
11	Principles of Computer Operation	9	
12	Algorithmic Thinking	10	
13	Representing Multimedia Digitally	11	Project due (12/4)
14	Get with the Program	18	

## Grading

Your course grade will be determined by occasional homework, in-class pop quizzes, a group project, two in-class midterms and a final exam. All quizzes and exams will be closed book and closed notes. Each pop quiz will be about 20 minutes long, the midterm exams will be 85 minutes long, and the final exam will be 2.5 hours long. Your grade in the course will be determined by the following breakdown:

HW, pop quizzes	30%
Group Project	10%
Midterms	30%
Final Exam	30%

You should do the Review Questions at the end of every chapter that we go over on your own. You do not have to turn these in, but the quizzes and exams will be similar to the Review Questions.

## Course Policies

Punctuality and class attendance is mandatory. **If you cannot attend some class, you must contact me beforehand.** As a general rule, I do not give makeup exams or quizzes, I do not allow students to take exams or quizzes on alternate dates, nor do I allow students to turn in assignments late. Of course, if someone has a legitimate reason (e.g., serious medical problem, conflict with a religious holiday), I will make allowances

as long as you provide proper documentation (e.g., a note from your doctor). I will not accept excuses such as having too heavy a workload or having too many exams the same week. Also, I do not give out extra-credit assignments.

For all exams and quizzes, be sure to bring a photo ID. All exams and quizzes will be closed book and closed notes. For quizzes and exams of 90 minutes or less, no one will be permitted to leave the room once an exam has started. If a student leaves before the exam period is concluded, his/her exam will be collected and not be returned. Students with special needs are advised to make arrangements with Disability Services for exam accommodations.

If upon getting back one of your exams or quizzes you think that you deserve more points on a particular problem, I will regrade the entire exam or quiz. Thus, you may get more points on the one problem, but you may lose points on other problems. Also, any questions about the grading must be asked within 48 hours of when the exam or quiz was handed back in class.

Unless you are otherwise instructed, all portable electronic devices, such as cellphones and laptops, must be turned off during class.

Students will be informed of any modifications or deviations from the syllabus throughout the course of the semester.

### **Honor Code**

Academic integrity and honesty are of paramount importance. The NJIT Honor Code will be strictly upheld, and any violations will be brought to the immediate attention of the Dean of Students. Honor Code violations include, but are not limited to,

- communicating with others during exams
- using unauthorized materials during exams
- copying/giving a computer program from/to another person.