



## IST611 Information Systems - Syllabus Fall 2008

### [IST611 Home](#)

**Lecturer:** Dr. Guy J. Cortesi [cortesi@nycap.rr.com](mailto:cortesi@nycap.rr.com) Office Hours: by appointment

**Course Description:** This course provides a detailed survey of information systems. It presents conceptual, theoretical, historical, social, economic, and ethical issues surrounding the development, deployment and management of dominant information systems technologies. Topics covered include: information systems architectures, database management systems, transaction processing, eCommerce, telecommunications, software and hardware standards, Internet/Web-based systems, data warehousing, data mining, agent-based systems, and social impacts of information systems.

### **Special Note:**

The instructor will be out of town for two Mondays (8/25 and 9/15), which includes the first class meeting. Since 9/1 is Labor Day, the first class will be 9/8. There will be make-up classes on either Wednesday or Thursday nights from 7:15-10:05PM, in Draper 147. We'll discuss the dates of the make-up classes during the first session to determine the best time for everyone. For the first class (9/8) please obtain the textbooks and complete the following assignment:

Read Stair ch. 1, 2  
Friedman, ch. 1, 2 pgs 30-126

H/W Stair Pg 55, Exercises 1, 2 (Print and hand in Exercise 2); Go to <http://www.esolvesolutions.com> and create an account and establish your profile in the Collaboratory. Feel free to create a blog entry and review others. (Due 9/8).

### **Course Objectives:**

1. Understand fundamental terms and concepts of information systems and associated technology
2. Learn basic skills needed to identify and evaluate information systems and technology, assess user needs, propose solutions, and evaluate proposals for implementation.
3. Communicate effectively about information technology with salespeople, technical specialists, users, colleagues, and administrators.

### **Textbooks**

1. Friedman - The World is Flat: A Brief History of the 21st Century - Further Updated and Expanded, 2007 edition (Version 3.0) in paperback ISBN-13 978-0-312-42507-4
2. Stair, Ralph M. and Baldauf, Kenneth J. Succeeding with Technology, - Succeeding with Technology 3rd Edition, 2008, ISBN-13: 978-1423925293

The textbooks are required and will be used in class when there are assigned readings. They can be purchased online (e.g. <http://amazon.com> or <http://alibris.com>), or at Mary Jane Books at the corner of Lark Street and Western Avenue in downtown Albany. They are NOT available at the University Bookstore in the Campus Center.

### **E-mail**

It is important for all course students to have an Internet-based e-mail account for this class. Students may use a university account or their own personal account.

### **Course Website**

This course has its own web site, containing assignments and readings. Please consult this site for the latest information regarding this course. It is located on the Internet at:

<<http://www.albany.edu/~gc227838/ist611>>

### **Exams**

There will be quiz, a mid-term examination, and a final paper.

### **Grading**

Homework: 10 points

Quiz: (10 points) - refer to Stair chapter "test yourself" problems and review Friedman text/class discussions.

Assignment 1: 10 points

Assignment 2: 10 points

Midterm Exam: 20 points - refer to Stair chapter "Test Yourself" problems, and "Review Questions" and "Discussion Questions" and review Friedman text/class discussions.

Assignment 3: 10 points

Assignment 4: 10 points

Final Paper: 15 points - refer to Stair chapter "Test Yourself" problems, and "Review Questions" and "Discussion Questions"

Participation (5): discussion (0-2), preparation for class (0-2), attendance \*\* (1)

\*\* See also **Class Attendance/Lateness**

**Total possible points = 100**

### **Grading Scale**

A: 100-95 points A-: 94-90 points

B+: 89-87 points B: 84-86 points B-: 80-83 points

C+: 79-76 points C: 75-70 points

D: 69-60 points

F: 59 points and below

### **Participation**

Each student is expected to participate in every class. Positive participation means speaking so everyone can hear; asking appropriate questions; replying to questions, contributing ideas and participating in discussion without dominating it; and helping others. Positive participation creates a supportive learning environment in which other students feel comfortable asking questions and everyone contributes to the discussion.

Positive participation requires that students come prepared for class. This means distilling the terminology and major concepts of assigned readings; having points of personal interest in mind for discussion; having questions in mind for ideas that are unclear; knowing what the day's topics will be and what assignments are due; and bringing appropriate texts, materials, and tools for the day's class.

### **Written and Verbal Expression**

Being able to communicate effectively with all sorts of people is necessary for sustained success in managing information systems. Students are expected to use proper spelling and grammar and to adapt their speaking and writing to their audience. Those who habitually use words, phrases, abbreviations or acronyms that may be unfamiliar to the audience without proactively explaining them in an understandable way, will have points deducted in written assignments and in class participation as applicable.

### **Class Attendance/Lateness**

Classes are scheduled to begin at 7:15 PM and end at 10:05 PM in DR015. (Note: This is a change from the course listing indicating DR023 as the class location). This may be adjusted slightly to accommodate students coming from uptown classes. There will be a 15 minute break during each class. Students are expected to attend every scheduled class. Students are responsible for all assignments, handouts, and work done in classes that are missed.

## Academic Honesty

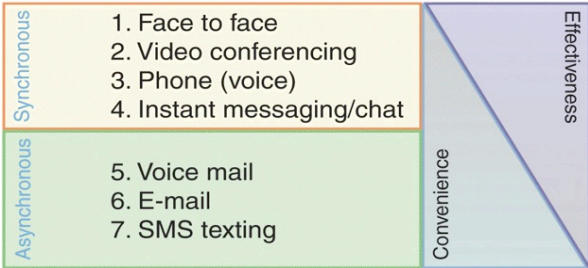
Students are expected to understand and abide by the “Standards of Academy Integrity” in the Graduate Bulletin at:

[http://www.albany.edu/grad/requirements\\_general\\_admissions.html#standards\\_integrity](http://www.albany.edu/grad/requirements_general_admissions.html#standards_integrity)

## Class Schedule

The schedule of classes as well as the other information in this syllabus is subject to change. Homework assignments will be added as the course progresses. The latest, authoritative version is the current one posted this website.

Date/Class#	Activities	Homework/Assignments
25-08-08	No Class - instructor out of town. See special note above.	Read Stair ch. 1,2; Friedman, ch. 1,2 pgs 30-126  H/W Stair Pg 53, Exercises 1, 2; Go to <a href="http://esolvesolutions.com">http://esolvesolutions.com</a> and create an account and establish your profile in the Collaboratory. Feel free to create a blog entry and review others. Due 9/8.
1-Sep-08	No Class - Labor Day	
8-Sep-08 (1)	Introductions Review syllabus, PC elements, Storage, I/O, selecting a PC  Flat World Overview	Read Stair ch. 3, 6; Friedman, cont. ch. 2 pgs 126-200  H/W Stair Pg 105, Exercise 1, Assignment 1 Due 9/22.
15-Sep-08	No Class - instructor out of town.	
X-Sep-08 (2)  18-Sep-08? (TBD)	Make-up class  Decision-Making; How the World Became Flat -The Flatteners	
22-Sep-08 (3)	Software, Digital Media, IT Research/ <a href="#">Decision making</a>  How the World Became Flat - The Flatteners (Cont).  ASSIGNMENT 1 Due	Read Stair 5; Friedman, ch. 3,4  ASSIGNMENT 2 - Due 10/13  H/W - repeat Stair Pg 53, Exercise 2 considering how opensource software may effect your decisions; also Stair Pg. 338 Exercise 4 (Visit <a href="http://www.pixar.com">www.pixar.com</a> and view <a href="#">link that explains Pixar's animation and movie making process.</a> Summarize the steps). Due 10/6.
29-Sep-08	No Class - School Holiday	
6-Oct-08 (4)	Networking & telecomm  How the World Became Flat - Triple Convergence	Read Stair ch. 4; Friedman, ch. 5  H/W - Stair Pg 227 Exercise 3, 4

<p>13-Oct-08 (5)</p>	<p>The Internet</p> <p>QUIZ 1 - weeks 1-3</p> <p>America and the Flat World</p> <p>ASSIGNMENT 2 Due</p>	<p>Read Stair ch. 11; Friedman, ch. 6</p> <p>ASSIGNMENT 3 - Due 11/3</p> <p>H/W prepare a decision matrix that accesses the overall effectiveness of the forms of synchronous and asynchronous communication forms shown in Figure 4.23 with respect to quality, convenience and time/delay. Determine your own weights for these criteria and compare your results to those shown in Figure 4.23</p> <p><b>FIGURE 4.23 • Evaluating forms of communication</b> Synchronous forms of communication that require individuals to be present and engaged simultaneously are less convenient but more effective.</p> 
<p>20-Oct-08 (6)</p>	<p>Information Security</p> <p>America and the Flat World</p>	<p>Read Friedman, ch. 7</p>
<p>27-Oct-08 (7)</p>	<p>MIDTERM - weeks 1-6</p> <p>America and the Flat World</p>	<p>Read Stair ch. 7, 8 ; Friedman, ch. 8</p>
<p>3-Nov-08 (8)</p>	<p>ASSIGNMENT 3 DUE - Class Presentations</p> <p>Database Systems, e-commerce (<a href="#">sample database</a>) ;</p> <p>America and the Flat World</p>	<p>Stair ch. 9, 10; Friedman, ch. 9</p> <p>H/W - refer to Stair Chapter 7 figure 7.8 and create and relate the presented tables and data using MS Access. Produce a print a report containing records from all three tables. Print out and hand in the table view of the results and the report. Save the file to your USB drive and bring to class.</p>
<p>X-Nov-08 (9)</p> <p>6-Nov-08? (TBD)</p>	<p>ASSIGNMENT 3 DUE Class Presentations (Continued)</p> <p>Database Systems, cont.</p>	<p>Bring USB drive to class.</p>
	<p>Database wrapup, midterm review, MIS/DSS/GDSS (<a href="#">Mrs Fields Cookies</a>, <a href="#">Excel</a>)</p>	<p>Read Friedman, ch. 10</p> <p>ASSIGNMENT 4 - Due 11/24</p> <p>H/W Visit <a href="http://www-ai.ijs.si/eliza/eliza.html">http://www-ai.ijs.si/eliza/eliza.html</a> and try out</p>

10-Nov-08 (10)	<a href="#">Soiver</a> ), AI ( <a href="#">Eliza</a> and <a href="#">other examples</a> including <a href="#">Google Natural Language</a> ), Systems development ;  America and the Flat World	<p>the program "Eliza". Write a few paragraphs that discuss the types of systems technologies described in Chapter 9 that are utilized in this program and compare its operation to <a href="http://www.ask.com">www.ask.com</a>. Create a flowchart, using the techniques in Chapter 10 to diagram a typical interaction with the Eliza based on your usage. Bonus (1 pt) Visit <a href="http://www.manifestation.com/neurotoys/eliza.php3">http://www.manifestation.com/neurotoys/eliza.php3</a> and download the code and alter Eliza to change its behavior and save the new version to your usb drive or a website to demo to the class.</p>
17-Nov-08 (11)	IT Management ( <a href="#">Altiris</a> , <a href="#">SMS</a> , <a href="#">WISE</a> ), IT Administration ( <a href="#">Tech Plans</a> , considerations - <a href="#">cabling</a> , location of <a href="#">wiring closets</a> , h/w & software, staffing, funding) ; Developing Countries and the Flat World	<p>Read Friedman, ch. 11</p> <p>In class - Using MS Access, create a database system that tracks a computers model number, serial number, MAC address, and RAM amount). Create an input form and enter the information for at least four computers into this system and create and produce a report displaying the results.</p>
24-Nov-08 (12)	Companies and the Flat World  ASSIGNMENT 4 DUE	<p>Read Stair ch. 12 ; Friedman, ch. 12, 13</p> <p>H/W using the design features to make handouts useful expressed at <a href="http://www.llrx.com/columns/guide27.htm">http://www.llrx.com/columns/guide27.htm</a>, redo your one page assignment 2 handout (make one copy only for instructor).</p>
1-Dec-08 (13)	Societal issues, ethics, laws; Geopolitics and the Flat World	<p>Read Friedman, ch. 14, 15</p>
8-Dec-08 (14)	Going forward with IT; Geopolitics and the Flat World Wrap-up / Conclusion  FINAL PAPER DUE  LAST DAY OF CLASS	

## Assignments

### **Assignment 1 - Requirements Assignment (paper)**

*Purpose: to apply listening, [decision making](#) and technology skills learned in class to develop a problem statement, needs assessment, and requirements specification. The student will act as the IT person and interview a technology user. The user should be an actual worker in a school, library, a help desk, an insurance firm front office, a dot-com programmer bullpen, etc, who deals primarily behind the scenes (not IT) such as a manager, clerk, administrator, or CEO. The student will attempt to discern the user's needs and present the user with several alternatives for consideration. The student should know enough about the chosen environment to be comfortable to determine the worker's need for a PC and associated hardware and software (including peripherals) in a realistic work environment.*

1. Define the problem (circumstances leading up to the person getting a new PC and peripherals)
2. Define the user's needs and selection criteria.
3. Develop a set of system specifications.
4. Scan the environment and identify at least three possible alternatives.
5. Conduct a decision analysis using a [decision matrix](#) and provide information about the solutions including approximate costs to the user.
6. Hand in items 1-5. Include printouts of all price quotes and technical specifications for all possible solutions.

### **Assignment 2 - The Flatteners and the Triple Convergence**

In a one page 1 1/2 spaced paper, discuss three of the flatteners that Friedman mentions in the reading. Discuss the kinds of examples he gives and provide other examples. Describe what the "Triple Convergence" is and how most people completely missed it.

### **Assignment 3 - Technology Update (2-3 minute presentation and 1 page handout)**

Referring to the Friedman "The World Is Flat" text, investigate a technology or innovation that piques your interest such as a new hardware or software; a technology trend that has or is becoming significant in effecting our culture, or a policy issue resulting from technology that has had a major impact on society. Topics must be approved in advance by the instructor. Each student will give a 2-3 minute in-class presentation that will include the following parts: what it is, why you are interested in it, and conclusion or direction you see this taking. A one-page summary of the topic with more details must be handed out to students and the instructor before the presentation begins. Grading will emphasize organization, grasp of the topic, clarity and accuracy, keeping within the allotted time, and a definite conclusion/recommendation. A list of major references used (in MLA format) must also be provided to the instructor.

### **Assignment 4 - AI Applications**

Use the Internet or online university library to search for new artificial intelligence (AI) applications. Write a 2-page report describing two of your most interesting findings and how you perceive that AI will effect the flattening of the world as identified by Friedman. (Ie - does or will these technologies effect the 10 flatteners? Will these types of technologies help to create new flatteners or minimize the effect of some of the 10? Is there a 4th convergence added to the triple convergence where not only are there 3 billion new workers in the global economy, but the same number or more AI systems performing jobs, making decisions, etc).

### **FINAL PAPER - Information Systems and Technology Proposal Assignment for the Flat World (10-12 page paper)**

Students may work individually or in pairs for this assignment. Each pair (or individual) will decide upon an organizational environment about which they are somewhat knowledgeable and is based upon a real situation that at least one of the students can provide details about.

Once the environment is defined, the student(s) will develop a proposal/recommendation for setting up a new "smart" office or classroom space/virtual work environment utilizing hardware/software technologies and techniques discussed by Friedman in "The World is Flat". The proposal should include an equipment list (PCs, printers, servers with shared network disk storage, specialized input or output device along with associated hardware and software, etc), technical connection diagram, a floor plan, detailed cost analysis, risk analysis, security concerns, policy issues, etc. Some suggestions for configurations that include "smart classrooms", advanced training rooms, and decision/meeting rooms may include technologies such as [SMARTBoards](#), projectors, [video conferencing](#), and [teleconferencing](#).

The proposal, including cover page, detailed writeup and discussion as identified above and a complete list of MLA formatted references shall be approx. 10-12 pages in length.

Updated 08/14/08 gjc