

MIST 4630: Network Application Development

Course Syllabus: Fall Semester 2009

Department of Management Information Systems
Terry College of Business
University of Georgia

Instructor: Ben Liu

Office: 315C Brooks Hall

Phone: 542-6444 (my office)

Classroom: Tues & Thurs 2:00 - 3:15pm, Caldwell Hall 305

Office Hours: Tuesday 3:30-4:30 (My office)

Help Session: TBA

Email: The best way to communicate with me is through e-mail at: mist4630@gmail.com.

Course web page: eLearning Commons

Prerequisites: MIST 4600 and MIST 4610 are required prerequisites for this course.

Course description: Web application development using a current development language and platform (Currently – Java – JSP and Servlets). Concepts include: application development strategies and techniques, web technology platforms, a web development language and web services. Projects will involve development of a Web application for an organization that will enable users to query a database on the organization's server.

Course objectives: Upon successful completion, students will be able to demonstrate (through completion of coursework, assignments and exams):

- Knowledge of Basic Web Technologies
- Knowledge of object-oriented design.
- Knowledge of Java utilities and collections.
- Knowledge of JavaServer Pages
- Knowledge of Java database connectivity (JDBC).
- Knowledge of Java Servlet basics.

Required texts and other materials: Murach's Java Servlets and JSP (2nd Edition), Andrea Steelman and Joel Murach, Mike Murach and Associates, 2003 (ISBN: 978-1-890774-44-8).

Some additional handouts may be handed out, posted on the Web, or transmitted electronically. These are still to be determined.

Course Topics

WEEK	DATES	TOPIC	READINGS
1	Aug. 18 – Aug. 20	Introduction to Course Review of Java Programming Introduction to NetBeans	Assigned Readings
2	Aug. 25 – Aug. 27	Review of Java Programming Introduction to NetBeans	Assigned Readings
3	Sep. 1 – Sep. 3	Java Database Applications	Assigned Readings
4	Sep. 8 – Sep. 10	Java Database Applications An Introduction to Web Programming	Assigned Readings Steelman and Murach – Ch. 1
5	Sep. 15 – Sep. 17	An Introduction to Web Programming Introduction to HTML	Steelman and Murach – Ch. 3
6	Sep. 22 – Sep. 24	Developing JSP Pages	Assigned Readings Steelman and Murach – Ch. 5
7	Sep. 29 – Oct. 1	Developing JSP Pages	Steelman and Murach – Ch. 5
8	Oct. 6 – Oct. 8	Review for Midterm Midterm Exam (10/8) (Oct. 8 - Midpoint of Semester)	
9	Oct. 13 – Oct. 15	Developing Servlets	Steelman and Murach – Ch. 6
	Oct. 20 – Oct. 22	The Structure of a Web Application Introduction to Course Project (Oct. 23 - Midpoint withdrawal deadline)	Steelman and Murach – Ch. 7
10	Oct. 27 – Oct. 29	Sessions and Cookies	Steelman and Murach – Ch. 8
11	Nov. 3 – Nov. 5	Adding Databases to Web Applications	Steelman and Murach – Ch. 14
12	Nov. 10 – Nov. 12	Adding Databases to Web Applications Exploration of Web Frameworks	Steelman and Murach – Ch. 14 Assigned Readings
13	Nov. 17 – Nov. 19	Exploration of Web Frameworks	Assigned Readings
14	Nov. 24 – Nov. 26	Thanksgiving break (no classes)	
15	Dec. 1 – Dec. 3	Project Work Course Review	
<p>Final Exam: Friday, December 11, 3:30 - 6:30 pm</p>			

IMPORTANT NOTE: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Course policies:

1. Academic Honesty.

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: www.uga.edu/honesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

This means that each student has a responsibility to read the policy (a copy is located at www.uga.edu/honesty) and comply with it. It's no defense to a charge of academic dishonesty to say 'I didn't know that was prohibited.' ... Students must perform all of their academic work without **plagiarizing, cheating, lying, tampering, stealing, receiving assistance from others** (unless the faculty member authorizes that assistance) **or using sources to assist in that work** (without giving fair attribution). (Source: "A Culture of Honesty at the University of Georgia." A pamphlet published by the UGA Office of the Vice President for Instruction).

Important! You are **NOT** to receive **ANY** outside assistance on the exams, quizzes, or computing projects without prior approval from the professor. In fairness to the students who are ethical, any student found violating the academic honor code will be prosecuted according to the UGA Academic Honesty procedures. **Your assignments must be the result of your individual effort.** Here is what you can and cannot do in terms of giving or receiving help:

(a) It is okay to look together at the questions provided to you by me, and talk about what steps need to be taken to complete the assignment. **It is NOT okay to show someone else your completed or partially completed assignment, or to allow them to copy such.** Of course you cannot "read" your program or any part of a solution to them either.

(b) It is okay to show someone an example from the class slides or the book that uses the same approach that ought to be taken for a particular part of the assignment, and talk about how that example is the same or different from the assignment. **It is NOT okay to take that example and mark it up with notes or changes to be made.**

2. **Attendance Policy:** Students are expected to attend classes and are responsible for obtaining information from missed classes from other students (this includes changes to due dates). **More than 4 unexcused absences may result in your being withdrawn from the course at the instructor's discretion.**
3. **Make-Up Exam Policy:** The instructor reserves the right to offer or not offer a make-up exam. Make-up exams will only be permitted if the instructor is notified directly by phone before the scheduled exam time (no emails accepted) if you are unable to attend an exam for any reason. However, if you do not contact the

instructor as required above by phone prior to the exam, then you will automatically receive a grade of 0 for missing the exam and no make-up exam will be permitted. Provided a make-up exam is permitted, it will carry an automatic deduction of 10% of the possible exam points. (For example, if you score a 85 on a 100 point make-up exam, an additional 10 points would be automatically deducted netting you a score of 75.) If a make-up exam is permitted, then it must be taken when offered by the instructor. If the student does not take the make-up exam at the time as offered, then their grade will reflect a 0 for that exam.

4. **Classroom Computer Use:** During class time, class room computers and personal laptops are for MIST 4630 course related work only unless otherwise directed by the instructor. The instructor retains the right to shut down a computer or eject a student from the class room if this policy is not followed or the student exhibits otherwise disruptive behavior. Multiple warnings may result in an instructor initiated course withdrawal. This means **NO Web surfing, Facebook, email, IM-ing or other non-class related computer use during the official times for the course.**
5. **Responsibility for Course Materials:** You are responsible for all material covered in class. If you are absent, you are responsible for obtaining the information you missed. To the maximum extent possible, class outlines, additional course materials, and announcements will be posted to the class web site.
6. **Changes to Due Dates:** The scheduled due dates for assignments, exams, and project activities are subject to change, but all changes will be discussed in class and posted to the class web site. It is your responsibility to ensure that you are aware of any such changes.
7. **Individual Assignments for Course:** There will be a number of individual exercises for this course that you should complete. You will be able to find links to these assignments on the course Web page, so you should check there frequently for updates.
8. **Questions about Homework Assignments:** Many of the course assignments will require you to analyze, design and write computer programs. While I welcome your questions about these assignments, there are some guidelines to follow. I will try to answer your specific questions about your computer programs. I will not be willing to do a general preview of a program before it is submitted. This means that questions like: "Will you please have a look at my program before I submit it to see if it is correct?" will receive the answer "No." In addition, you will be required to show evidence that you have analyzed the problem and planned your program before help will be given. Evidence can include such items as event tables and pseudocode. This will demonstrate to me that you have spent some time in thinking about the problem before programming. It will also aid me in understanding what you are trying to do in your program more efficiently.
9. **Grade Discussion Policy:** It is the student's responsibility to monitor his or her own grades. Assignment and test grades will be posted to the course web site. As each component of your grade is posted for the first time, an announcement may be

made in lecture and/or the course web site. However it is your responsibility to check the website. **IMPORTANT:** Notification of intent to discuss any grade must be received, via e-mail, within one week of the grade postings. Requests for grade discussion after this time period may not be considered. In the email, provide your contact information and clearly state the specific item(s) that you would like to discuss.

10. SMIS: It is also expected that you will attend 5 SMIS (<http://www.ugasmis.org/>) meetings during the semester. If you did not already know, the Society for Management Information Systems (SMIS) is the representative student organization at the University of Georgia for the MIS program. Its goal is to build relationships between the MIS students, UGA / MIS alumni, company recruiters and MIS faculty. You will greatly benefit from attending SMIS meetings, or even better, from becoming an active member or SMIS officer.

Programming assignments:

This is primarily a programming course. You will be submitting computer programs for the majority of your assignments. Unless otherwise stated in the specific requirements for an assignment, your programs should be written with the following general guidelines in mind. Failure to do these can result in points subtracted from an assignment grade.

Programming Assignment Guidelines:

- **Documentation** – use comments in your code to document your program. All program files should contain a set of comments that list the title of the program, the last date modified, and the programmer's name. In addition, you should use enough comments within your code so that someone else could read through the code and comments and understand your program logic. Programs should not be excessively commented.
- **Robustness** – in most cases, your programs should work in the most general sense possible. Basically, do not hard-code values that should be provided as input by the user or that could be determined from the dataset used. For example, if you are asked to write a program using a dataset that currently includes 10 items, you should not use a loop that iterates from 1 to 10. Instead, you should first determine the number of items programmatically and then iterate up to the total number of data items. In other words, your loop should work if items are added or deleted from the list (I will do this when grading to make sure that the program still works).
- **Program sets** – Most assignments will include a set of problems for you to complete. For these sets - I will typically look to make sure that all programs have been submitted and I will also look inside each of the programs to make sure that all guidelines have been followed.

- **Evidence of Planning** - good programming requires good planning and problem analysis. To receive partial credit on non-working programs, you must also show evidence that you have analyzed the problem and planned an approach. (From experience, it is best for you to do this before beginning to program, rather than try to do it after you have decided that you are lost with a non-working program.)
- **Appropriate naming for objects and variables** – Be consistent in naming your objects and variables. All objects used must be assigned a logical name.
- **Testing/Debugging** – Be sure to thoroughly test your programs with all possible inputs and user interactions. You should do both positive and negative testing. Positive testing involves testing the behavior of your code when valid data is entered. Negative testing involves testing the behavior of your code when invalid data has been entered.

Course requirements and evaluation:

There will be a midterm and a final exam. All students must take exams at the scheduled times except for emergencies. Also, you will be assigned a number of individual assignments that are designed to enhance your knowledge of the material. **All deliverables are due at the start of class on the due date unless otherwise specified.** A major project will be assigned to develop an interactive, data-based web site. Your grade on the project will be based on the quality of the three deliverables that you produce.

Important note: The homework projects are an individual effort unless otherwise specified by your instructor. Any evidence of cooperation on them will result in the involved individuals being referred to the appropriate university authorities.

Evaluation of each student’s grade will be based on each of the following deliverables and weights:

Item	Percent of Total
MidTerm Exam	20%
Final Exam	35%
Homework Assignments	20%
Instructor Discretionary, Participation, Attendance	5%
Group Project	20%
Total:	100%

IMPORTANT NOTE: You must score at least 60% on averaged raw score for the two exams in order for the group project and homework assignments to count toward your final grade. In other words, the projects cannot help you pass the course if you have a failing grade on the midterm and final exams. This policy is meant to ensure that you

have done your own work and a significant portion of the project work in order to obtain substantial individual understanding of the course material.