

IST 256  
APPLICATIONS PROGRAMMING FOR INFORMATION SYSTEMS  
**Spring 2012**

Class Section 3:	Tuesday, Thursday 12:30 – 1:50 pm	Hinds 027 ( iTell Lab)
Class Section 2:	Tuesday, Thursday 5:00 – 6:20 pm	Hinds 027 ( iTell Lab)

Instructor:	Dr. Nancy McCracken njmccrac@syr.edu	Office: 209 Hinds Hall
Phone:	443-3955 (office)	Office Hours: Tuesday 11:15am-12:15pm in 027 Hinds Thursday, 3:30-4:30pm in 209 Hinds

Homework help sessions: will be scheduled in the week before each homework assignment is due.

Skype: If Prof. McCracken is logged in to Skype, njmccracken, please feel free to call on evenings or weekends to get help.

TAs: Shekhar Shah      shekhar.shah89@gmail.com  
Grace Ng (Section 3)  
Sharon Lee (Section 2)

**Course Description:**

This course will teach the critical thinking skills needed for students to design and work with information systems. Design of information systems will be taught by a problem-solving approach that will emphasize how to look at a problem as something that can be solved computationally. The ideas of this approach will be achieved by implementing the designs in a structured programming language: covering basic programming control constructs, user interfaces and object-oriented design. The information system applications will typically include small examples of transaction processing, business information systems and e-commerce. A broader context of programming will also be described in the role of programming languages in the Information Technology organization.

**Learning Outcomes:**

At the end of the course you should be able to

1. Use critical thinking to design solutions to problems in information system applications.
2. Design simple user interfaces that are easily understood and used.
3. Write efficient and elegant computer programs that can be easily understood by a

- knowledgeable person.
4. Have a good understanding of the main ideas of programming control constructs, modularization and data representation using an object-oriented approach.
  5. Understand how information is stored and manipulated in examples of information system applications.

### **Course Delivery:**

The course will include a combination of lecture, design (thought) exercises, programming exercises, quizzes, homework assignments and projects, and exams. The programming language used will be Java through the NetBeans programming environment. A weekly schedule, including exam and assignment due dates, will be placed in the Learning Management System (Blackboard).

### **Coursework and Grading (Tentative):**

Weekly Labs, Quizzes and Participation	20%
Homework Assignments and Final Project	40%
Two in-class Exams and Final Exam	40%

### **Textbook:**

There is no required textbook. Handouts describing the programming language will be placed in the iLMS along with links to supporting on-line materials, and all material will be covered in class.

Recommended books: For those who wish more reading material to begin the class, the following book has an easy introductory style to beginning Java language constructs, but not the use of NetBeans for developing the user interface of a program.

*Java in easy steps*, Mike McGrath. Computer Step, 2008, 3<sup>rd</sup> edition. List price \$14.99, \$8.24 at Amazon.

For those who wish to own a permanent reference book to Java, recommendations will be given in class.

### **Participation:**

In this course, a typical class consists of a short presentation of a new programming construct or example, a demonstration of how to think about solving a problem and write a program using that idea, and a guided lab to give hands-on experience. Since participation in the classes and the labs contributes strongly to the learning outcomes of the course, it is a significant portion of the grade.

The participation grade includes attendance all class sessions, which is required and will

be checked either by taking attendance or by taking a short in-class quiz. Illnesses and other emergencies will be excused with appropriate documentation, and the grade will also allow a small number of unexcused absences (three).

Lab sessions will be handed in weekly and checked. All reasonable attempts will count towards the participation grade.

### **Homework:**

There will be three individual homework assignments in which each student will demonstrate that they can take a problem statement, design a solution, and produce a working program to solve that problem. Homework will be due at the start of class the day the assignment through the iLMS (Blackboard) system. Late homework will be accepted, but will be subject to a late penalty.

The final project will be a group project in which groups can choose from a number of typical information problems, and design and implement a solution as a group.

### **Exams:**

Two in-class exams and a final exam will test each student's mastery of the problem solving ideas and programming constructs learned in the course.

### **The iLMS is now on Blackboard:**

The iSchool uses the Syracuse University's Blackboard system to facilitate distance learning and main campus courses. The environment is composed of a number of elements that will help you be successful in both your current coursework and your lifelong learning opportunities. To access Blackboard, go to the following URL: <http://blackboard.syr.edu>

*Note: The iSchool has migrated to the Syracuse University Blackboard learning management system effective summer 2011 semester. Fall 2011 courses will be on the SU Blackboard system.*

### **Firefox**

Blackboard is **not** compatible with Internet Explorer. As you continue to use Blackboard during your time at the iSchool, please use Firefox to access Blackboard. You can download Firefox for Mac and PC here: <http://www.mozilla.com>. If you run into any problems using Blackboard, please contact [ilms@syr.edu](mailto:ilms@syr.edu) for support.

### **Assignments**

To submit your assignments in Blackboard (there is no "Assignment Dropbox"), click on the name of the assignment to open it, and scroll to the bottom of the page. Under part 2 – Assignment Materials – you will see "Attach File." Select the file from your computer, then click "Submit." Once you have submitted your assignment, visit My Grades to

confirm submission and view your grades. For instructions with screen shots, please visit our [Student Support page](#).

**Additional Support**

Please visit our [Student Learn page](#) on the iSchool website for important announcements, information, access to both learning management systems, and a link to Blackboard Support for students. We recommend you bookmark this page for future reference.

You can access the Blackboard Support page directly as well. Please visit our [Student Support page](#) on Answers for support. This page will be updated frequently with useful information. We recommend you bookmark this page for future reference.

***Please note that this page is under development.***

## **Academic Integrity**

The academic community of Syracuse University and of the School of Information Studies requires the highest standards of professional ethics and personal integrity from all members of the community. Violations of these standards are violations of a mutual obligation characterized by trust, honesty, and personal honor. As a community, we commit ourselves to standards of academic conduct, impose sanctions against those who violate these standards, and keep appropriate records of violations. The academic integrity statement can be found at: [http://supolicies.syr.edu/ethics/acad\\_integrity.htm](http://supolicies.syr.edu/ethics/acad_integrity.htm).

## **Disabilities**

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

## **Ownership of Student Work**

This course may use course participation and documents created by students for educational purposes. In compliance with the Federal Family Educational Rights and Privacy Act, works in all media produced by students as part of their course participation at Syracuse University may be used for educational purposes, provided that the course syllabus makes clear that such use may occur. It is understood that registration for and continued enrollment in a course where such use of student works is announced constitutes permission by the student. After such a course has been completed, any further use of student works will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the work's creator/originator(s); or (2) the creator/originator(s)' written permission will be secured. As generally accepted practice, honors theses, graduate theses, graduate research projects, dissertations, or other exit projects submitted in partial fulfillment of degree requirements are placed in the library, University Archives, or academic departments for public reference.