-Indiana University Southeast
Course Syllabus
CSCI 202 - Introduction to Software Systems
INFO 211 – Information Infrastructures II
Summer 2014

Instructor: Dr. Suranga Hettiarachchi

Class Meeting Days	Time	Location
Tuesday Thursday	1:00 to 3:30PM	LF-105

Office Hours: Tuesday & Thursday 4-6:30 PM (and by appointment.) in LF114
Course Homepage: on course
Contact: Email: suhettia@ius.edu (best way to get hold of me)
Phone: 812-941-2698
Textbook: Comprehensive Version – Introduction to Java Programming, by Daniel Liang, 9th or 10th Edition, ISBN – 13: 9780132936521.

Objectives and Expectations:
This is an advanced course in software development. It introduces software engineering technology by using object-oriented concepts and techniques. To learn these techniques, you have to work hard in this class. This class is for students that focus on learning the subject matter rather than just a grade. **If you are not willing to work hard, this might be the wrong class for you**. If you work hard and learn the subject matter, you will have a good grade at the end of the semester. This is not a course about Java; this is a course about programming concepts, fundamentals and their applications in software systems. The class focuses on five areas of knowledge,

1) Fundamental Constructs
2) Algorithmic Problem solving
3) Recursion
4) Even Driven Programming
5) Data Structures

The Objectives of the course:

- Develop programmatic solutions to simpler to complex problems
- Demonstrate application of advanced Java programming techniques to problem solving
- Apply software engineering methodology in programming
- Describe, design and implement several different data structures and abstract data types
- Demonstrate theoretical and empirical implications of different algorithms.

Attendance and Participation Policy:
The student is expected and advised to be present at every class meeting, read the text in advance ***(absolutely important)***, bring questions to the class and is always responsible for all material discussed in the class meetings. Spending good period of time in the computer laboratory is very important; both attendance and participation will be considered for the final grade.

Performance Evaluation:	Points
10 - Lab assignments	15%
10 - Quizzes	15%
06 - Programming Assignments	30%
01 - Midterm Examination	20%
01 - Comprehensive Final Examination	20%

Grading Policy:
The attendance, participation in class and lab, interest, persistence to overcome difficulties will be considered along with the performance evaluation to attribute a final latter grade to the student. Following letter grade (in terms of %) criteria: i.e., **>97 A+**, ***>94 A; >90 A-; >87 B+; >83 B; >80 B-; >75 C+; >70 C; >67 C-; >64 D; and <=60 is F.*** Will be the basis in attributing the final letter grade.

Quizzes, Programming, Laboratory, and Test Policy:
Although cooperative efforts are not admitted, particularly in the Tests and Programming assignments, however students are encouraged to **discuss** among themselves any course materials and ask questions at any time in or out of

the class. Do your own work. Programming can only be learned by developing, implementing, and executing programs. The more you practice the better you become at programming. **I am available to help you on all of your assignments**, so come and talk to me if you run in to difficulties. Turning in an incomplete program is not an option.

There are also lab helpers available on all weekdays throughout the semester for you to get help, so complaining about not having help is not an option!

There are 10, 1 hour long ***online quizzes***. If you keep up with the lectures, reading, and labs these won't be difficult. There will be no make up quizzes. You will receive an oncourse messages when a quiz is available, please keep up with oncourse messages.

There are 10 lab assignments. The labs are for you to get more programming practice. You must attend the labs, if you are unable to finish the lab during the allocated time, you should complete the work on your own and show the completed lab to your instructor to receive credit. Late work will not receive credit.

There are 6 programming assignments (several of them are group assignments) and you must complete them by your own or with your group members. Late work will not receive credit.

Turning in an incomplete program is not an option! I do not give partial credit for programming assignments. The quality of your work is absolutely important, and you are required to pay close attention to improving quality of your programs (be observant and follow the examples).

All exams are in class and contain some multiple-choice questions, short answer/essay questions, and an open textbook programming problem.

All assignments have firm deadlines; I will not accept late submissions without a valid written medical excuse. ***All work should be turned in at the due date*****. Instructions for turning in homework are provided in oncourse.**

Tentative course outline and schedule:

Week	Material Covered	Activity (Chapters)
1	OO concepts, Arrays, Strings	**Pre-Test, Lab #1 (6, 7, 9, 12)**
2	Software Engineering, Design by Contract	**Q1, Lab #2, PA1**
3	Exceptions, File I/O	**Q2, Lab #3, (14)**
4	Recursion/ Searching	**Q3, Lab #4,PA 2, (20)**
5	Searching/Sorting	**Q4, Lab #5, PA 3, (6, 25)**
6	Algorithm Efficiency	**Q5, Exam Review, (24)**
7	Midterm Exam	**Exam 1**
8	Inheritance/Abstract Classes/Interfaces	**Q6, Lab #6, (11, 15)**
9	GUI/Event Driven Programming	**Q6, Lab #7, PA 4, (16)**
10	Generics/ Collection Framework/ADT	**Q7, Lab #8(21)**
11	Lists	**Q8, Lab #9, PA 5, (22, 26)**
12	Trees	**Q9, PA 6, (27)**
13	Stacks/Queues	**Q10, Lab #10, (22)**
14	Comprehensive Final Exam	**Exam Review (22,26)**

I reserve the right to change this schedule at any time.

All work and your conduct are subject to the Indiana University Code of Student Ethics.

Students with Disabilities: Please contact Office of Disability Services at University Center South, Room 207, 812-941-2243.

The Departments of CSCI and INFORMATICS have a shared Red Hat server at address csi-ada.ius.edu ***and it will be used for educational support. In addition, all faculty/student news and announcements will be posted there and it is reachable in your favorite browser. It can also be secure-telneted to for software development. Contact your faculty member about an account.***

There is so much help available for you to be successful at IUS. If you don't take the initiative to seek help,

nobody would know that you needed help.

SPECIAL REQUEST: Please pay attention to personal hygiene. I do not want to smell body order, any tobacco products, excessive cologne, or perfume.

The oncourse Guide

All course material is available via on course and you should have the access to following content of the course.

Home Page: Your instructor's office hours are listed with a link to help schedule. Help is available for all your work, so please make sure to get help if you are having difficulties with course material.

Announcements: Postings of deadlines, especial announcements, reminders will appear in announcements. Every time an announcement is posted, you will receive an email, and they are also visible on the Home page.

Syllabus: This syllabus can be accessed anytime thorough this tab.

Messages: I am available for you to communicate via Messages, I will reply to messages within 24hrs. I will not answer code questions without a complete program attached to your message. No questions regarding programming assignments will be answered if messages are received within the 24 hour period of due date/time. So make sure to ask your questions early! Keep all conversations professional.

Resources: All Lectures, Lab Resources, Programming Assignments, Exam related material, and Extra Examples can be found here in individual folders.

Modules: There is a module for each chapter. The modules contain links to extra tutorials, practice programs, and external online practice tests. This extra material can be helpful in your quizzes, programming assignments and exams.

Grade Book: Nobody but you and I have the access to your grades. You can keep up with your current grade as the semester progresses. If you notice any discrepancy in your grade, please contact me immediately.

Chat Room: You can use to communicate with others, discuss problems, and share extra resources. Do not post any unprofessional content, and I will immediately remove them. Do not post answers to assignments. I will check the chat room and try to give my feedback once every 24hour period.

Forums: You can use to communicate with others, discuss problems, and share extra resources. Do not post any unprofessional content, and I will immediately remove them. Do not post answers to assignments. We will have a fresh forum for each assignment. You can explain solutions to questions using algorithms, but you are not allowed to write code in Forums. You may use code examples that are not directly an answer to an assignment. I will check forums and try to give my feedback once every 24hour period.

Test & Surveys: You will fine pre/post test and all quizzes here. All graded quizzes are available with feedback to your answers until the end of semester.

Extra Links: JAVA API – Documentation for Java Programming Language that you will have to depend heavily to look up certain programming constructs throughout the semester.