Advanced Java
Spring 2014
Syllabus

Part 1: Course Information

Instructor Information

Instructor: Nan Wang
Office: TEC 232
Office Hours: Tuesday-Friday from 2:00-3:00pm (Online discussion: http://usmjava.blogspot.com/)
Office Telephone: 601-266-6286
E-mail: personal contact: nan.wang@usm.edu, course related contact: usm.java@gmail.com

Course Description

This is an advanced Java Programming course for students in computer science and other majors. Topics include: Interfaces, IO handling, Recursion, Java Collections framework, Basic Data structures, General classes, GUI and web related programming, multithreading, internet network.

Prerequisite

- CSS Introduction of Java Programming.

GE Area if Applicable

- Satisfies the mathematics requirement for General Education. Lecture and lab.

Textbook & Course Materials

Required Text

Big Java: Early Objects 5th Edition
Publisher: Wiley, John & Sons, Incorporated

Recommended Texts & Other Readings

Java: How to Program

Publisher: Prentice Hall; 9 edition (March 7, 2011)
ISBN-10: 0132575663
Part 2: Course Objectives

- To provide an understanding of the essentials of programming languages on the example of Java.
- To give you practical experience of writing Java programs of intermediate complexity.
- To introduce graphical user interface design on example of Java applets.
- To improve your programming skills.

You will meet the objectives listed above through a combination of the following activities in this course:

- Attendance 5%
- Lab assignments 50%
- Midterm exam 10%
- Final exam 15%
- Project 20%

Part 3: Topic Outline/Schedule

- Week 01: Review of basic concept of Java programming
- Week 02: Review of Array and Arraylists, Classes and objects
- Week 03: Inheritance
- Week 04: Polymorphism
- Week 05: Exception Handling
- Week 06: GUI
- Week 07: Graphics and Java 2D
- Week 08: String, Characters and Regular Expressions
- Week 09: Files, Streams and Object Serialization
- Week 10: Recursion, Searching and Sorting
- Week 11: Generic Collections
- Week 12: Generic Classes and Methods
- Week 13: Applets and Applications
- Week 14: GUI 2
- Week 15: Multithreading
- Week 16: Networking
Part 4: Grading Policy

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
<td>Excellent Work</td>
</tr>
<tr>
<td>A-</td>
<td>90-92%</td>
<td>Nearly Excellent Work</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
<td>Very Good Work</td>
</tr>
<tr>
<td>B</td>
<td>83-86%</td>
<td>Good Work</td>
</tr>
<tr>
<td>B-</td>
<td>80-82%</td>
<td>Mostly Good Work</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
<td>Above Average Work</td>
</tr>
<tr>
<td>C</td>
<td>73-76%</td>
<td>Average Work</td>
</tr>
<tr>
<td>C-</td>
<td>70-72%</td>
<td>Mostly Average Work</td>
</tr>
<tr>
<td>D+</td>
<td>67-69%</td>
<td>Below Average Work</td>
</tr>
<tr>
<td>D</td>
<td>60-66%</td>
<td>Poor Work</td>
</tr>
<tr>
<td>F</td>
<td>0-59%</td>
<td>Failing Work</td>
</tr>
</tbody>
</table>

Academic Honesty

Students are expected to do their own work on all assignments, projects and tests except the assignments are given as team work. Assignments that appear to be substantial duplicates of other submitted student work will be treated as instances of academic misconduct. The following text is extracted from the USM Undergraduate Bulletin:

"When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the Dean of Students."
In addition to being a violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion. Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi.

DAD Policy

If a student has a disability that qualifies under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address: The University of Southern Mississippi

Office for Disability Accommodations

118 College Drive # 8586

Hattiesburg, MS 39406-0001

Voice Telephone: (601) 266-5024 or (228) 214-3232 Fax: (601) 266-6035

Individuals with hearing impairments can contact ODA using the Mississippi Relay Service at 1-800-582-2233 (TTY) or email Suzy Hebert at Suzanne.Hebert@usm.edu.