CS 2133: Computer Science II
Spring 2020 Syllabus

Instructor Information

Name: Rittika Shamsuddin
Office: MCS 212
Email: r.shamsuddin@okstate.edu
Virtual Office Hours: T 3:00 - 5:00 pm, or by appointment

Class Information

Dates: 19th Jan - 30th April
Time: MWF 2:30 - 3:20 pm
Classroom: Student Union 265

TA Information

Name: TBA
Email: TBA
Office Hours: TBA

Course Description

This course continues the Java-based introduction to basic computer science concepts begun in Computer Science I. Essentially, this course covers the use of object-oriented programming to design and implement software solutions. Students will learn and understand how to design large programs to make them readable, maintainable, elegant, and efficient. In addition, students will also learn to analyze the program and predicts its efficiency. Java is the language used; it is an object-oriented programming language that was designed for developing large systems from reusable components. Prerequisites: CS 1113 - Computer Science I.

Online Lectures

Please note that lectures and discussions held in class may be recorded or videotaped and uploaded to Canvas. Only students enrolled in this class may access this content.

COVID Policy

All OSU students, employees, and visitors must wear a facial covering (mask) upon entering any campus building and when near or encountering others. This includes during class. Students who fail to wear their facial covering in class will be asked to leave the classroom and
return after retrieving their facial covering. Students who continuously fail to comply with this university expectation will be referred to Student Conduct for the Student Code of Conduct’s Failure to Comply policy. All Student must follow the seating arrangement while in class. Attendance will be taken before every class starts, this will not count towards your grade. This is for the purpose of contact tracing.

Textbook, & Software

No particular book is required for this course. However, I would recommend the following books for reference.

Textbook1: Walter Savitch, Java: An Introduction to Problem Solving and Programming (8th Edition)
Textbook2: Introduction to Java Programming, Brief Version, 10E. Daniel Liang.

Course Outline and Tentative Schedule

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Getting Started, Java introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Object Oriented Programming - Objects, Classes</td>
</tr>
<tr>
<td>Week 3</td>
<td>File I/O, Debugging, Testing</td>
</tr>
<tr>
<td>Week 4</td>
<td>Arrays, Recursion</td>
</tr>
<tr>
<td>Week 5</td>
<td>Inheritance, Polymorphism</td>
</tr>
<tr>
<td>Week 6</td>
<td>Interfaces</td>
</tr>
<tr>
<td>Week 7</td>
<td>Comparable Interfaces, GUI</td>
</tr>
<tr>
<td>Week 8</td>
<td>More GUI and Midterm</td>
</tr>
<tr>
<td>Week 9</td>
<td>Model View Controller</td>
</tr>
<tr>
<td>Week 10</td>
<td>Exception Handling, Stream IO</td>
</tr>
<tr>
<td>Week 11</td>
<td>Java Generics, Searching and Sorting</td>
</tr>
<tr>
<td>Week 12</td>
<td>Analysis of Order of Growth, Linked List</td>
</tr>
<tr>
<td>Week 13</td>
<td>Stacks, Queues, Heaps, Trees</td>
</tr>
<tr>
<td>Week 14</td>
<td>Introduction to Dynamic Programming, Regular expression</td>
</tr>
<tr>
<td>Week 15</td>
<td>Fall Break</td>
</tr>
<tr>
<td>Week 16</td>
<td>Pre-Finals week</td>
</tr>
<tr>
<td>Week 17</td>
<td>Finals week</td>
</tr>
</tbody>
</table>

Class Participation

Students are responsible for any material covered in class. Some of the material covered in class will not be in the textbook. Announcements about tests etc. will be made in class and/or by email. All the lecture recordings will be posted on Canvas. Students are to check their emails regularly (using their class accounts).

Assignments, Quizzes and Exam

- Assignments will usually be due on Wednesdays/Friday at midnight. We will often go over assignments in class the next Monday. Late assignments will be penalized 10%.
• If you need an extension on any Assignment for any reason, contact your instructor in a timely fashion, as permitted by the need.

• Assignments should be handed in to the D2L dropbox (online.okstate.edu) as a single .zip file. Your programming projects will be tested using jGrasp. Ensure proper setup for 100% grades.

• There will be two exams, a midterm and a comprehensive final. These will account for 40% of your grade, and the final counts for twice as much as the midterm. You will be permitted one sheet of handwritten notes for each.

• Academic integrity is taken very seriously. You are permitted to discuss the course material with fellow students in general terms, but the programs you write must be your own. Code copied from each other or found on the web will result in an automatic zero for the assignment, and may even result in earning an ‘F!’ for the course and facing academic disciplinary measures.

• There will be a Quiz at the end of every week on Canvas. It is open book and open notes.

**Grading**

The course grade is determined by the following components:

- Midterm + Final Exam 40%
- Assignment 50%
- Quizzes 10%

Final grades will be assigned according to the following scale,

Grade A 90-100%
Grade B 80-89%
Grade C 70-79%
Grade D 60-69%
Grade F 0-59%

**DEPARTMENT POLICIES**

**Drop and Add Policy:** Students will be allowed to drop as long as the University permits them to do so. A grade of W or F will be determined on the basis of the points earned until that time.

**Academic Dishonesty/misconduct:** The Computer Science departmental policy for academic dishonesty and misconduct applies to this class. In addition, a student attempting to gain unfair advantage by keeping an examination paper longer than the time permitted is guilty of academic misconduct.

**Computer Usage:** The Computer Science departmental policy for computer usage applies to this class. Exceptions will be made for students whose companies permit use of company machines for academic work. Students taking advantage of the exception must have two-way email access.

**Americans with disabilities act:** The Computer Science departmental policy for students with
disabilities applies to this class. Anyone who has a need for examinations by special arrangements should see the instructor as the earliest possible opportunity during scheduled office hours.

**Examinations/Tests:** No discussion of any kind (except with the instructor) is allowed. No access to any type of written material is allowed. Students who do not comply with the described collaboration policy will receive a grade of F in the course. Furthermore, the case will be reported to the University Officials.

**Important Dates**

- Drop and Add - Jan 26, 29
- Wellness Day - Feb 3, Wednesday
- Wellness Day - Mar 4, Thursday
- Drop with W - Apr 9
- Wellness Day - Apr 13, Tuesday