Course Syllabus

Course Number: COMP 1217
Course Title: Honors Fundamentals of Computing I
Credit Hours: 3 (LEC. 2, LAB. 3)
Prerequisites: Membership in Honors College
Corequisites: None

Text Book:

Description: Introduction to the fundamental concepts of programming from an object-oriented perspective. Emphasis on good software engineering principles and development of fundamental programming skills in the context of a language that supports the object-oriented paradigm.

Course Objectives:
1. Be able to design and implement simple programs based on informal problem specification.
2. Be able to implement classes and methods when provided the informal specification.
3. Be able to apply concepts and techniques of object-oriented programming.
4. Be able to perform informal testing and debugging techniques.
5. Be able to understand the interdependencies of an object-oriented program.

Tentative Course Outline:
1. Computer Systems (1 week)
2. Objects and Primitive Data (1 week)
3. Program Statements (2 weeks)
4. Writing Classes (2 weeks)
5. Enhancing Classes (2 weeks)
6. Arrays (2 weeks)
7. Inheritance and Polymorphism (2 weeks)
8. Exceptions and I/O Streams (2 weeks)
9. Software Engineering (1 week)

Tentative Lab Schedule (topics by week):
1. Introduction to lab facilities, programming environment (1 week)
2. Working with objects and primitive data (2 weeks)
3. Using control structures (3 weeks)
4. Using classes (1 week)
5. Writing classes (1 week)
6. Enhancing classes (1 week)
7. Using arrays (2 weeks)
8. Using inheritance (1 week)
9. Designing with inheritance and polymorphism (2 weeks)
10. Writing exceptions and using I/O streams (1 week)

Requirements/Evaluation: Students grades will be determined by their performance on three exams and approximately 10 lab assignments consisting of activities, exercises, and programming projects. Pop quizzes, if given, will be counted as part of the programming assignment component of the grade. The weight of each component is specified below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>15%</td>
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<tr>
<td>Exam 2</td>
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<tr>
<td>Final</td>
<td>35%</td>
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<tr>
<td>Laboratory Activities</td>
<td>5%</td>
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<tr>
<td>Laboratory Exercises</td>
<td>10%</td>
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<tr>
<td>Laboratory Programming Assignments</td>
<td>20%</td>
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Attendance Points – see Attendance Policy below.

Letter grades will be assigned per the standard 10-percentage point scale.

Academic Honesty: All portions of the Auburn University Honesty Code found in the Tiger Cub will apply to this class.
Special Accommodations: Students who need special accommodations should make an appointment with me to discuss the Accommodation Memo as soon as possible. If you do not have an Accommodation Memo but need special accommodations, please contact the Program for Students with Disabilities in 1224 Haley Center (phone 844-2096 V/TTY).

Attendance Policy: Attendance will be taken during the first few minutes of each class. Students may be absent or tardy for up to two classes with no loss of points. For each absence beyond two, the student will accrue one penalty point. Penalty points, if any, will be deducted from the course average to determine the final grade.

Honors Course:
COMP 1217 is the honors version of COMP 1210. The lecture component of COMP 1217 is separate from COMP 1210, but the lab component is shared. COMP 1217 offers a small-group lecture section separate from COMP 1210 to facilitate a high degree of student-instructor interaction and allow for a more in-depth and rigorous treatment of course topics. COMP 1217 students will be evaluated differently and against a higher standard than COMP 1210 students.