APC 390: Object Oriented Programming – Course Syllabus

IMPORTANT: This course syllabus document contains basic information about the course. A final syllabus with detailed guidelines, instructor information, project information, rubrics, course/university policies, and other course-related information will be provided to students upon course enrollment.

Course Description and Objectives
This course offers an introduction to object-oriented programming techniques using the Java programming language. Students will gain skills in using classes and interfaces, exception handling, programming by contract, inheritance, polymorphism, overloading, abstract classes and methods, serialization, generics, and an introduction to recursion.

By the end of this course, you will be able to:
- Use object-oriented techniques to write Java programs.
- Develop code using the programming-by-contract approach.
- Use inheritance, polymorphism, and abstract classes in programs.
- Develop custom exception classes and use them in programs.
- Develop classes and interfaces with overloaded methods.
- Use serialization to store and communicate objects.
- Develop code that creates graphical user interfaces.
- Demonstrate the ability to perform project management calculations.
- Develop code that uses recursive methods to solve problems.

Prerequisites
- APC 350: Programming II

Grading

Evaluation Methods
Your final grade will be based on your performance on the following:

<table>
<thead>
<tr>
<th>Item(s)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments*</td>
<td>60%</td>
</tr>
<tr>
<td>Discussions</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes**</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Drop 1 low score
**Drop 2 low scores
Grading Scale
The following grading scale is used to evaluate all course requirements and determine your final grade:

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

Workload
Students should expect to spend 144 credit hours per semester to complete the activities and assignments in this course. In a fall or spring semester, the time to dedicate per credit will range between 7-10 hours per week and in summer semester between 10-13 hours.