APC 300: Programming I – 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 the history of computing, fundamental computer concepts, and structured programming techniques. It provides hands-on coverage of simple data types, problem solving, program design, conditional execution, loops, and basic user-defined methods. Java will be used to teach the basic concepts of program analysis, design, implementation, debugging, and testing.

By the end of this course, you will be able to:
- Demonstrate knowledge of programming and computing history.
- Demonstrate knowledge of the Java programming language.
- Demonstrate knowledge of fundamental computer concepts and structured programming techniques.
- Demonstrate basic knowledge of program analysis and design.
- Use various simple data types in their programs.
- Develop code using control structures for conditional execution.
- Develop code using repetition structures.
- Use predefined java methods.
- Develop and use basic user defined methods.
- Design, develop and debug complete application programs.

Prerequisites
None

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

<table>
<thead>
<tr>
<th>Item(s)</th>
<th>Percentage of Final Grade</th>
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<tbody>
<tr>
<td>Programming Projects</td>
<td>30%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Quizzes</td>
<td>3%</td>
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<tr>
<td>Discussions</td>
<td>2%</td>
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</table>
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.