APC 350: Programming II – 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 the continuation of fundamental computer concepts and programming. It provides hands-on coverage of methods, File IO, arrays and their applications, abstract data types, classes, simple GUI application, and introductions to inheritance and composition. Prerequisites for this course are APC 300 and APC 310.

By the end of this course, you will be able to:
- Describe the basic concepts of abstraction, encapsulation, and instantiation.
- Develop and use advanced Java methods.
- Develop and use Java classes and objects.
- Describe the application of arrays for storing collections of objects.
- Develop code that declares, initializes, and uses arrays.
- Develop code that creates, uses, and manipulates files.
- Develop simple GUI applications.
- Describe inheritance for software development.

**Prerequisites**
- APC 300 – Programming I
- APC 310 – Math for Computer Science

**Grading**

**Evaluation Methods**
Your final grade will be based on your performance on the following items:
- Assignments (40%)
- Exams (40%)
- Final Exam (20%)

**Assignments**
There is one assignment in each unit. Each assignment is worth 100 points. Assignment 1 is worth 5% of your final grade, and Assignments 2 through 6 are each worth 7% of your final grade.

**Exams**
There is one exam in each lesson. You only have one attempt to complete each 10-point exam. Exams 1 and 2 are both worth 2% of your final grade, and Exams 3 through 14 are each worth 3% of your final grade.
Final Exam
The final exam has 100 points and is worth 20% of your final grade.

Grading Scale
The following grading scale is used to evaluate all course requirements and determine your final grade:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90–100%</td>
</tr>
<tr>
<td>B</td>
<td>80–89%</td>
</tr>
<tr>
<td>C</td>
<td>70–79%</td>
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<tr>
<td>D</td>
<td>60–69%</td>
</tr>
<tr>
<td>F</td>
<td>0–59%</td>
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</tbody>
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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.