**AP Computer Science A - Term 1**

**PACING GUIDE**

|  |  |  |
| --- | --- | --- |
|  | **Week** | **Lesson** |
| Week of Oct 2 - review | 1 | * Lesson 1: Output in Java hw#4 * Lesson 2: Escape Characters hw#4 |
| Week of Oct 2 - review | 2 | * Lesson 3: User Input and Variables hw#4 * Lesson 4: Data Types hw#5 * Lesson 5: Number Calculations hw#5 * Lesson 6: Numeric Casts * **Assignment 1 - Assigned and Due** |
| Week of Oct 2 - review | 3 | * Lesson 7: Modular Division * Lesson 8: String and Number Output * Lesson 9: Math Functions * **Quiz 1** |
| Week of Oct 2 | 4 | * Lesson 10: Roundoff Error * Exam 1 * **Assignment 2 - Due During Week 5** |
| Week of Oct 10 ( 4 days) | 5 | * Lesson 11: Simple if's * Lesson 12: If’s - Making Decisions * Lesson 13: Else |
| Week of Oct 16 | 6 | * Lesson 14: Booleans and Truth Tables * Lesson 15: Short Circuit Evaluation * Lesson 16: DeMorgan’s Law * **Quiz 2** * **Assignment 3 - Due Week 7** |
| Week of Oct 23 | 7 | * Lesson 17: While Loops * Lesson 18: Tracing Code and Counting Iterations * Lesson 19: More Loops * Lesson 20: Flag Variables |
| Week of Oct 30 | 8 | * Lesson 21: Strings as Class Types * **Exam 2** |
| Week of Nov 6 & 13 ( 8 days) | 9 | * Lesson 22: String functions * Lesson 23: 1-D Arrays * Lesson 24: The for loop * **Assignment 4 - Due Week 9** |
| Week of Nov 20 ( 2 days) | 10 | * Lesson 25: Algorithms * Lesson 26: Algorithms on Arrays * Lesson 27: Algorithms - Searching * **Quiz 3** * **Assignment 5 - Due Week 11** |
| Week of Nov 27 | 11 | * Lesson 28: Arrays of Strings * Lesson 29: Arrays of Strings accessing Methods * Lesson 30: Process Array of Strings |
| Week of Dec 4 | 12 | * Lesson 1011: Binary * **Exam 3** * **Assignment 6 - Due Week 13** |
| Week of Dec 11 | 13 | * Lesson 31: Void Methods * Lesson 32: Parameters |
| Week of Dec 18 | 14 | * Lesson 33: Parameters - Primitive vs Class * Lesson 34: Return Methods * **Quiz 4** * **Assignment 7 - Due Week 15** |
| Week of Jan 2 ( 4 days) | 15 | * Lesson 35: Overloaded Methods * Lesson 36: Recursion - Part 1 |
| Week of Jan 7 | 16 | * Lesson 37: Recursion - Part 2 * **Exam 4 - Term 1 Final** |

**AP Computer Science A - Term 2**

**PACING GUIDE**

|  |  |  |
| --- | --- | --- |
| Week of Jan 14 ( 4 days) | 1 | * Lesson 1: ArrayList * Lesson 2: The for each Loop |
| Week of Jan 22 ( 4 days) | 2 | * Lesson 3: Classes - The Basics * Lesson 4: Constructors * **Quiz 1** * **Assignment 1 - Due Week 3** |
| Week of Jan 29 | 3 | * Lesson 5: Static vs. Instance * Lab: Intro to the Labs and Magpie * **Lab: Magpie - Due Week 4** |
| Week of Feb 4 | 4 | * Lesson 6: AP Exam Review * **Exam 1** * **Assignment 2 - Due Week 5** |
| Week of Feb 11 | 5 | * Lesson 7: Inheritance |
| Week of Feb 18 ( 4 days) | 6 | * Lesson 8: Inheritance Overriding Methods * **Quiz 2** * **Assignment 3 - Due Week 7** |
| Week of Feb 25 | 7 | * Lesson 9: Abstract Classes * Lesson 10: Is-A and Has-A Relationships |
| Week of March 4 | 8 | * Lesson 11: Interfaces * **Exam 2: Due 2/24/2017** * **Assignment 4 - Due Week 9** |
| Week of March 11 | 9 | * Lesson 12: Wrapper Classes * Lab: Elevens * **Lab: Elevens - Due Week 10** |
| Week of March 18 | 10 | * Lesson 13: Algorithms * Lesson 14: Linear Search * **Quiz 3** * **Assignment 5 - Due Week 11** |
| Week of March 25 (4 days) | 11 | * Lesson 15: Selection Sort * Lesson 16: Insertion Sort |
| Week of April 1 ( 3 days) | 12 | * Lesson 17: Binary Search * Lesson 18: Merge Sort * **Quiz 4** * **Assignment 6 - Due Week 13** |
| Week of April 8 | 13 | * Lesson 19: 2-D Arrays * Lesson 20: 2-D Array Algorithms |
| Week of April 15 | 14 | * Lesson 21: Tracing Code * **Exam 3: Term 2 Final** * **Assignment 7 - Due Week 15** |
| Week of April 22 | 15 | * Lab: Picture * **Diagnostic Exam** * **Lab: Picture - Due Week 17** |
| Week of April 30 | 16 | Unit 9 - AP Exam Prep |
| Week of May 7 | 17 | Unit 9 - AP Exam Prep |
| Week of May 14 | 18 | AP EXAM - 5/15/2018 |