**AP Computer Science A - Term 1**

**PACING GUIDE**

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|  | **Week** | **Lesson** |
| Week of Oct 2 - review | 1 | * Lesson 1: Output in Java hw#4
* Lesson 2: Escape Characters hw#4
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| 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**
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| 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**
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| 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
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| Week of Jan 7 | 16 | * Lesson 37: Recursion - Part 2
* **Exam 4 - Term 1 Final**
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**AP Computer Science A - Term 2**

**PACING GUIDE**

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| Week of Jan 14 ( 4 days) | 1 | * Lesson 1: ArrayList
* Lesson 2: The for each Loop
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| 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**
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| 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**
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| Week of April 22 | 15 | * Lab: Picture
* **Diagnostic Exam**
* **Lab: Picture - Due Week 17**
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| 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 |