



Computer Science AP A

Course Number: 172251

Pre-requisites: Computer Science 1

Instructor: Mr. Barry Wagner

E-Mail Address: bwagner@dentonisd.org

Conference Period: B3, B4

Phone: 940-369-2067

Tutorials: M-Th 4:10 – 4:50

Course Objectives and Goals:

This course is a continuation of Honors Computer Science with emphasis placed on the development of object-oriented programming techniques using the Java language. Algorithm creation and analyzes will also be covered. Preparing students for the Computer Science AP A exam is one of the main goals of the course.

Resources:

Web-based curriculum (<http://bwagner.org>)

How to Prepare for the AP Computer Science AP Exam - Barron's

Grading Policy:

- Refer to the School Districts Approved Grading Policy

Rules/Class Procedures:

1. Be on time.
2. Complete labs in the time allotted.
 - If a student falls behind the pace of the course, then after school tutorials are available to help him or her get caught up.
3. This Computer lab is for learning computer science and computer programming.
 - Students must complete all assignments before doing work for other classes.
 - Students must complete all assignments before playing on the Internet.
 - Students may only use cell phones the last **10 minutes** of class or if they have completed all assignments.
 - An assignment is not complete until it is recorded on teacher's clipboard or placed in the assignment box.
4. Do not install any software on a computer in this lab.
5. Do not use a **proxy server** to by-pass school district filtering.
6. Stay in your seat until the bell rings or it is time to dismiss.
7. Peer tutoring is encouraged.

The Denton Independent School District does not discriminate on the basis of sex, handicap, race, color, and/ or national origins in its educational programs. Admission to career programs is based on age, grade, interest, aptitude and ability. Lack of English language skills will not be a barrier to admissions and participation in any educational programs.

Scope:

1. Honors Computer Science Review
2. Object-Oriented Programming
 - a. Encapsulation
 - b. Polymorphism
 - c. Inheritance
3. Searching
 - a. Sequential Search
 - b. Binary Search
4. Sorting
 - a. Selection Sort
 - b. Insertion Sort
 - c. Merge Sort
5. Arrays and ArrayLists
 - a. Create
 - b. Insert
 - c. Traverse
 - d. Delete
6. 2D Arrays
 - a. Create
 - b. Insert
 - c. Traverse
 - d. Delete
6. Recursion
7. AP Test Preparation

Please sign, detach, and return the bottom portion of this form.



“I, _____, parent/guardian of _____ have read
and understand the syllabus for XXX class. “

Parent/Guardian: _____
Signature

Date

Student: _____
Signature

Date

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