Teacher	Cmdr. Schenk	Semester and Year	Fall 2021 – Spring 2022
Course	AP Computer Science A	Email	schenkr@fultonschools.org
Website	http://www.hawkeyedriver.com	Room Number	302

Textbook   All students will be expected to purchase the AP Computer Science preparation handbook. Information will be provided to students in class with respect to timing and where to purchase this preparation guidebook. These manuals are critical for test preparation.

Course Description:

The goal of the **AP Computer Science - A** course is comparable to the introductory course for computer science majors offered in many college and university computer science departments. It is not expected that all students in this class will major in computer science. Nevertheless, this class is intended to serve as an introduction course for computer science majors, and as a course for people who will major in other disciplines and want to be informed citizens in today's technological society.

This class is taught at the college freshman level. Although this course can be taken with no programming experience beforehand, it is highly recommended that students complete the two prerequisites for this course: Introduction to Digital Technology and AP Computer Science Principles.

Expectations/Course Requirements:

As with all department courses, this course is designed to help prepare students to be more productive, trusted and valued as employees. Participation and a good attitude is expected. Independence and on- task behavior is expected. Professionalism is expected at all times. Teamwork and mutual respect are a necessity.

There will be increased focus on providing students with every tool possible to enable their best preparation/performance on the AP Exam. There will be **significant** code-writing practice, and for efficiency, we will be using the Eclipse Integrated Development Environment (IDE) for all coding. This is a free IDE that can be downloaded and installed for home use as well. It is a peer-reviewed and production quality IDE. Students will receive significant setup instruction in class.

All students are to act as young adults in the classroom. They will treat others and be treated with respect at all times. Failure to act responsibly can result in disciplinary action.

Top performing students will be recommended for advancement into the Computer Science Senior Seminar Work-Based Learning Program. This advanced program will further prepare serious students for a career in Information Technology and Software Engineering.

Standards
AP-CS-1 Object-Oriented Program Design
AP-CS-2 Program Implementation (Learning the JAVA Language)
AP-CS-3 Program Analysis (Testing, De-bugging, Exception Handling, Code/Memory Analysis)
AP-CS-4 Standard Data Structures
AP-CS-5 Standard Operations and Algorithms
AP-CS-6 Computing in Context (System reliability, Privacy, Legal Issues, Intellectual Property)

Class Units and Topics

	Topic	Class Periods
0	Course Introduction, Foundations & CTSO (FBLA)	10
1	Baseline Java & Introduction to Objects	19
2	Advanced Java Concepts	18
3	Putting Java to Work: Modeling, Generics, Arrays, & Sorting	19
4	Coding Sorts and Language Review, Exam Prep/Fall Wrap-up	16
5	Structured Language, OOP Review, Hand Coding	14
6	Advanced Java Programming: UI & Database Introduction	19
7	Spring Master Projects using Agile	19
8	Project Presentations, Hand Coding with IDE Verification	15
9	Final Prep, AP Exam, Future Concepts and Languages	21

Grading Scale

90-100 A   **80-89** B   **70-79** C   **0-69** F

Grading Weights (COVID-19 Policy)

Majors	60%
Minors	20%
Semester Diagnostic	20%
Total	100%

Course Policies Specific to this Course

It is very important for students to arrive on time, and to maintain a continuous attendance routine. Our class content builds rapidly, and missing class makes keeping up with the pace of class significantly harder.

With specific prior permission, and only in very extenuating situations, the teacher may authorize some projects to be submitted via email. **These rare situations are the only circumstances in which email collection is accepted.**

While most submissions will be completed via Microsoft Teams, and printing of projects or assignments, if required, shall be completed *prior to the due date*. If projects are not available for collection on arrival on their due dates, they will be penalized as late.

COVID-19 Guidelines

Should COVID-19 cases require remote learning, all grading and turn-in requirements shall be in accordance with county-directed policies and will be enforced. Student attendance daily is expected, and attendance will also be enforced according to county guidelines.

Opportunities for extra help or study sessions:

Help sessions may be scheduled for before school, and when possible after school. Students must request help sessions twenty-four hours in advance.

During URL, Teams extra instruction will be by appointment or open office hours which will be announced.

Honor Code/Plagiarism Policy

Integrity is a Johns Creek High School core value. Johns Creek students are expected to demonstrate honesty and integrity in all work submitted to a teacher. The honor code ensures the validity of student work which guides instruction. All JCHS students are bound by the Johns Creek Honor Code. (See Student Handbook for more detailed explanation.)

Recovery Policy

Recovery for student work is strictly in accordance with 2021-2022 Fulton County policy.

Make Up Work Policy

Students may make up all work missed on an excused and preapproved absence. Work assigned during the absence must be returned to the teacher within the same number of days as the absence which was excused. Unexcused absences may result in grade reduction. There will never be new instruction the

day before an assessment. This time will be used for review. Students absent the day of an assessment will take the assessment on arrival back at school.

Late Work Guidelines

Late work will be governed strictly by Fulton County guidelines for 2021-2022.

Technology/Cell Phones at JCHS

Johns Creek High School supports the use of technology for academic pursuits. This includes cell phones, tablets, and laptops. The use and type of technology in a classroom is at the sole discretion of the teacher. All technology must be turned off and put away upon entering each classroom. Permission to use technology in a classroom will be explicitly stated by the teacher. Students may possess technology for personal use outside of classrooms in common areas. All devices must remain in silent mode, and students should use headphones when listening to sound. Students are responsible for the safety and security of their own devices and are not required to possess personal technology for instruction. In the case of an emergency, all technology should be turned off and put away as not to interfere with administrative emergency procedures.

Absolutely no earbuds or earphones are to be worn in class. On specific lab days, they may be authorized at the teacher's discretion. The pacing of our class requires full attention of students.

Computer Science Portal – We now have an online portal for our computer science classes, that will provide real-time blog information, all content presented in classes, assignments, and other information germane to each class. The blog is visible to anyone at http://www.hawkeyedriver.net.

Students are expected to routinely: Be in attendance of Teams classes, check the Team & portal for their assignments and feedback, and to be active in their educational process.

If we have any digital learning days due to inclement weather, all assignments will be given via the course pages and the blog.

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  Student/Date   Parent/Date