



# AP COMPUTER SCIENCE A

## COURSE DESCRIPTION

AP Computer Science A is an introductory, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies, organization of data, approaches to processing data, analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes problem solving and design using Java language. The AP Computer Science A course curriculum is compatible with many Computer Science 1 courses in colleges and universities.

AP Computer Science A will be utilizing standards-based learning and assessment (SBLA) which measures students' proficiency on a set of standards for the grade/content level. The Standards Based Learning and Assessment approach:

- Indicates what students know and are able to do
- Shows student progress toward meeting a standard
- Communicates expectations ahead of time
- Is based on complex tasks, as opposed to memorization
- Focuses on recent evidence of learning.

## COURSE REPORTING STRANDS

### Semester 1

Intro to Computer Science & Java  
Primitive Data Types & Variables  
Intro to Object Oriented Programming  
Boolean Expressions & Conditional Statements  
Iterations & Arrays

### Semester 2

Strings  
Classes, Class Hierarchies & Interfaces  
Array Lists  
Recursion  
Searching & Sorting  
Computing in Context

## DISTRICT RESOURCES

Textbook / E-Book: Myprogramminglab [Java Programming, AP Version](#) – Pearson College Div - 2015

[5 Steps to a 5: Ap Computer Science A](#)

Dean Johnson-Carol Paymer-Aaron Chamberlain - Mcgraw-hill Education – 2017

Chromebook: Charged Chromebooks are to be brought to class on a daily basis. If a student does not bring his or her Chromebook, the student is expected to continue participating in class and complete all class work.

## SPECIFIC COURSE ACTIVITIES

In order to demonstrate proficiency in course standards, students will need to:

1. Participate in class activities (take notes, contribute to group work, complete in-class tasks, ask questions, etc.)
2. Complete assigned homework as needed in order to practice and improve learning.
3. Use formative assessments to track learning progress and identify strengths and weaknesses with the course content and complete outside practice in activities when necessary.
4. Complete all assessments (formative and summative).
5. Create and follow through on a plan of improvement, when demonstrating little to no understanding of learning targets.

## STUDENT EVIDENCE/ASSESSMENTS

Assessments based on SBLA demonstrate that students have the knowledge and skills necessary for success in the next grade, next course, and finally for college and career. Scores do not compare one student to another. They measure how students are doing on the grade/course level standards.

Evidence of learning (summative) and evidence for learning (formative) include any artifact that indicates whether or not a student has achieved proficiency in a standard. This can occur through in-class work, formative events, mid-unit, end of the unit, and end of course assessments.

**PROFICIENCY SCALE**

Standards-based rubrics will be used to determine students’ level of proficiency, using the 0-4 scale based on set criteria. Rubrics will be distributed at the beginning of a unit of study and referred to throughout the learning progression for the purpose of providing feedback. Rubrics for the course can be found on the math website.

Score	What does it mean?
4 = Mastery	Demonstrates the ability to apply extended thinking about the skills and knowledge of the standard
3 = Proficient	Demonstrates skills and knowledge of the standard
2 = Basic	Demonstrates a basic understanding of the skills and knowledge of the standard
1 = Below Basic	Demonstrates a below basic understanding of the standard; may demonstrate gaps in skills and knowledge
0 = No Evidence	There is no, or insufficient, evidence of learning to assess the standard at this time
NE = Not Evaluated	This standard has not been evaluated at this time

**MAKEUP POLICY**

Summative assessments that are missed will be marked “missing” or “not evaluated” in the grade book until completed. Students have five school attendance days to complete a missed assessment. Incomplete assessments result in a lack of evidence of student’s understanding and may cause a student to fail.

**REASSESSMENTS**

Students will have multiple assessment opportunities to demonstrate higher levels of achievement on any assessment that is used to determine an overall proficiency and grade. The opportunities may be initiated by the instructor or the student, but always at the discretion of the teacher. Reassessments must be completed within a reasonable time of the original assessment being returned to the student.

After a reassessment, the most current grade will show in Infinite Campus. For example, if a student starts with a 2 and then earns a 1 on a reassessment, the 1 will be the score reflected within Infinite Campus and in grade determination. If the student instead earns a 3, the 3 will be the score reflected.

**LATE WORK**

Any late work that a student may have must be turned in within the reassessment window. Once the reassessment window is closed, the assessment will no longer be accepted.

## EXTRA CREDIT AND BONUS POINTS

To ensure that grades reflect progress toward and achievement of the standards, giving extra credit points or bonus points will not occur in this class. The vision of U-46 is that behavior/participation will be reported separately from academic achievement and is not a component of a student's academic grade.

## GRADE DETERMINATION

Infinite Campus is used to communicate students' proficiency in each assessment, overall reporting strand, and the *predicted* semester letter grade. The semester letter grade will be informed by the student's learning proficiencies throughout the semester. Mastery of standards leads to mastery of the reporting strands, which in turn leads to mastery of the course.

- Standards-based rubrics will be used to determine students' level of proficiency, using the 0-4 scale, on individual standards and assessments.
- A *predicted in-progress* letter grade for each reporting strand will be calculated within Infinite Campus by averaging each of the proficiency scores in the strand.
- A *predicted semester* letter grade for the course will be calculated within Infinite Campus by averaging each of the reporting strands.
- The equal incremental grading scale to determine a letter grade is below.

Equal Incremental Grading	
A	3.21 – 4.00
B	2.41 – 3.20
C	1.61 – 2.40
D	0.81 – 1.60
E	0.80 - Below

## ACADEMIC DISHONESTY/PLAGIARISM POLICY

Academic dishonesty refers to cheating, copying, plagiarizing, or otherwise representing the work of others as one's own through verbal, written, graphic, electronic, or other means. Students determined to have been academically dishonest are subject to disciplinary action. Consequences will depend on the severity of the offense, the number of offenses, the impact on other students and teacher, and/or the curriculum. Academic dishonesty undermines the learning process and will not be condoned.