



Chandler Unified School District

CSC335 AP Computer Science A

Semester 2, SY 2022-23

Course Overview

CTE Program

Software & App Design

Course Description

CSC335 AP Computer Science A

Advanced Placement (AP) / International Baccalaureate (IB) / Dual Enrollment

This is an AP course. An additional syllabus will be provided outlining specific AP/IB/Dual Enrollment requirements for this course.

Site

School name and address:

Arizona College Prep High School, 4477 S Gilbert Rd, Chandler, AZ 85249

Building principal:

Robert Bickes

bickes.robert@cusd80.com

Faculty Information

Teacher:

Lynn Theresa Hoang BA

Hoang.lynn@cusd80.com

480-424-8896

Office hours: M-T-Th 2:20-4pm

Course Learning Outcomes

After this course, students will be able to:

- Design and implement computer-based solutions to problems.
- Develop and implement algorithms and data structures to solve new problems.
- Write, run, test and debug solutions in object-oriented programming - language
- Read and understand a description of the design and development process
- Understand the ethical and social implications of computer use.

Materials and Fees

Course Materials: Students are responsible for bringing the following supplies

n/a

Course Attire: Students are responsible for the following

None for this course.

Course Fees

CSC335 Fee: \$20

Curriculum and Instructional Resources

Adopted Resource(s)

- Coursework will center around online activities and sources. Links will be provided as needed on the course website.
- It also will reference a free online textbook. Eck, David J. "Introduction to Programming Using Java." Hobart and Williams Smith Colleges.
- Code.org, ProjectSTEM, CSAwesome and CodeHS curriculum are used as supplemental materials. These are among the curriculums approved by the College Board as an authorized AP® Computer Science A course.

**An asterisk will indicate a resource containing sexually explicit materials per legislative definitions.*

CUSD has determined that all resources listed above are of exceptional educational value.

Equipment Usage Agreement:

Students will receive training for the proper use and care of all equipment. I understand that while my student uses school equipment, they are responsible for its care. If school equipment is damaged, lost, stolen, or destroyed under my student's care, I further understand that my student and I will be responsible for the replacement or cost of repair of the damaged equipment.

CTE Program Responsibilities:

Career & Technical Student Organization (CTSO)

Career & Technical Student Organizations (CTSOs) are co-curricular organizations that help enrich applied academics, communications, and teamwork. Students in CTE programs can participate in CTSO leadership activities and competitive events.

This program is aligned with the following CTSO: SkillsUSA.

Industry Credentials

All CTE programs allow each student to earn an industry certification aligned to their CTE program area. This CTE program will offer the following industry credential(s) for all students by program completion: Pearson IT Specialist (Java).

Technical Skills Assessment (TSA)

Technical Skills Assessments (TSA) are an Arizona Department of Education high-stakes state assessment designed for each program area. The TSA is to certify and document student attainment of industry-validated knowledge and skills through online testing. The TSA is taken after the CTE program (year 2 or 3) of each program.

Non-Discrimination Clause/ Aviso de no discriminación

The non-discrimination clause can be accessed using the link or QR code
www.cusd80.com/Page/983



Course Access

This course is taught in person at Arizona College Prep High School. Students will have access to the curriculum and instruction in the classroom. Google Classroom is the primary location for students to access material when absent from classes taught in person. Buzz is the primary location for COA students to access materials at all times.

- Clever cusd80.com/Page/45109 (select secondary courses will use clever)

Computer Requirements

Students can use devices to engage with electronic resources and turn-in select assignments.

Help

Academic Support

- Contact the teacher to schedule an appointment during office hours
- [NetTutor](#) offers K-12 CUSD students free live tutoring, question drop-off, and writing feedback (cusd80.com/NetTutor)
- [Ed Tech](#) support for students, parents/guardians, and community link (cusd80.com/Page/45109)

Mental Health Support

- CUSD's Counseling and Social Services Department provides access to mental health support for students and families through their webpage cusd80.com/Domain/10528
- US Department of Health and Human Services 9-8-8 hotline
- 24-hour Crisis Line Talk: 602-222-9444, Text: 741-741

Student Conduct, Success, and Responsibilities

Student Handbook

Students must follow the policies and procedures established in the Student Handbook. Copies of the handbook can be found at <https://www.cusd80.com/handbooks>. Printed copies will be provided upon request.

To be successful

BE RESPONSIBLE:

- Be on time, prepared to learn and participate each day. That means being in the classroom, getting ready for class. Go to the restroom before entering the classroom. Entering after the bell has rung will constitute a tardy. No restroom pass the first 15 or last 10 minutes of class.
- This course takes place in a computer lab. Upon arriving, put cell phone in the phone cubby, log on to computer in preparation for the day's activities. Some activities in this course will be "unplugged" and will not require a computer. When not using the computer, put the computer's keyboard on top of the computer case and turn off the monitor.
- Ask for help as necessary significantly before and turn in assignments on or before deadlines.
- Complete individual projects independently to demonstrate your own work and contribute ideas to make the classroom an effective learning environment.

BE RESPECTFUL:

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- Respect for each other's ideas, person, and property is expected and encouraged in this class at all times. Negative comments or actions of any kind will not be tolerated.
 - Pay attention to whomever "has the floor". This means everyone (and their computers) will be quiet and attentive.
 - Collaborate as necessary to assist yourself and others in understanding the topics discussed.
 - NO food or drink in the computer lab except water in containers with caps.
 - DO NOT play games once finish assignments. Ask Mrs. Hoang for enrichment activities, read a book or work on other class assignments.
 - DO NOT get out of seat without permission.

Student Responsibilities

PLAGIARISM

Every student is expected to do their own work. The student's grade is a determination of their mastery of the content, not someone else's. Any student caught plagiarizing any portion of any assignment will receive a zero on that assignment. Copy an example of an app taught step by step online and modified it before turning it in as your is considered cheating.

That said, collaboration is an important component of this class and of any creative process. Students are encouraged to help each other when difficulties arise. Just make sure to give credit where credit is due.

ELECTRONIC DEVICES

ACP HS Electronic Device policy states that students' cell phones and electronic devices are not to be used, seen, or heard in the classrooms and hallways without prior permission from their teacher during that class period. We will follow this policy in this class.

This is a technology class and appropriate use of cell phones is condoned. For example, cell phones may be used to test your websites and applications, scan documents for turning in. Phones should NOT be used to: take pictures of other students without their permission, communicate with anyone outside of the classroom without permission, play games during class.

Inappropriate use of electronic devices will result in consequences following APC HS policy. The offending device will be sent to the office to be collected by the student or their parent at the end of the school day.

DISCIPLINE PLAN

The students are expected to display Respect and Responsible behaviors of Success Learners. For those that struggle with meeting the expectations, the following steps will be taken:

1st offense: Verbal warning

2nd offense: Written warning and behavioral contract

3rd offense: Call/Email parents/guardian and lunch detention

4th offense: Referral to the office

Late work

ATTENDANCE AND LATE WORK

Attendance is an integral part of being successful in this class. Others may be relying on you. Students may be dropped from the class after ten absences following an administrative review. Work that is due on the day of an unexcused absence will not be allowed for make-up and will result in a zero for the assignment.

Assignments are essential to learning. Students have one week from the date of an excused absence to make up assignments or arrange for a make-up test. It is the student's responsibility to check on missed classwork, notes, assignments, etc. If you know you will be out, please check ahead of time.

Failure to submit or hand in a WEEKLY assignment on the due date will result in a loss of points. All assignments need to be submitted online. The time of submission will be logged. You might earn up to 60% of the assignment grade for a late submission.

Assessments and Assignments

Students will complete assessments during each unit of study to assess their understanding. Students will complete a final at the end of the first and second semesters. The final will count for 20% of the student's final semester grade in grades 9-12 and 10% in grades 7-8 (some exceptions may apply at the Junior High level).

Final exams will be given during the CUSD Jr High/High School Early Dismissal days in December and May, as identified on the [District Calendar](#).

If students are requested to participate in a survey, the survey questions will be provided to parents/guardians seven days before student contact.

Grading

Grade Percentage

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	<60%

Quarter grades

Classwork (40%): Grades for classwork and projects will be entered into Infinite Campus Weekly. Point values for individual assignments will vary. In class assessments will be factored into this category.

Projects (20%): The nature of the course requires that students participate during class time and in groups outside of class, because the other members of the group and the class rely upon the contributions of each student, participation will be factored into the student's grade. Extra credit in this category may be available for students who show willingness to assist others when difficulties arise.

Formal Assessments (40%): Unit Exams that are designed to be in the "style" of the AP multiple choice assessments. The questions are not specifically about lessons covered prior to this point. Rather, the questions relate to the underlying AP learning objectives that have theoretically been addressed. The students would have opportunities to do some extrapolation from what they've learned to answer the questions.

Semester grades

The following formula is used to calculate semester grades

- 40/40/20: Each quarter accounts for 40% of the semester grade and the final exam accounts for the remaining 20%.

Units of study

Parents/Guardians should indicate if they “Agree” or “Disagree” with their student’s participation in each of the following units of study.

PREREQUISITES

Computer Science Principle

Strong foundation in English and Mathematics. Students must be comfortable with functions and the concepts found in the uses of functional notation.

COURSE OVERVIEW

The course is organized into 10 Topics/Units with activities that ensure that students are engaging in the 5 Computational Thinking Practices below while developing the skills through exploring the topics:

- Practice 1: Program Design and Algorithm Development, Code Logic to determine the output, value, or result of given program code given initial values.
- Practice 2: Code Implementation to write and implement program code.
- Practice 3: Code Testing to analyze program code for correctness, equivalence, and errors.
- Practice 4: Documentation to describe the behavior and conditions that produce identified results in a program.
- Practice 5: Determine required code segments to produce a given output.

Upon the completion of this course, beside being able to take the AP CSA exam, students will take the State Technical Skills Assessment for completion of 2-year Software and App Design, and Industry Credential for Information Technology Specialist - Java.

LEARNING STRATEGIES

- The learning experiences of the course consist of video lectures, daily programming exercises, longer coding assignments, and regular quizzes and exams.
- Students will also participate in online discussion forums.
- Each lesson includes practice exercises, including shorter coding problems.
- Well over 75% of instructional time is spent in hands-on coding using the course coding exercises, lab assignments and AP labs.
- Students participate regularly in a moderated discussion forum that provides support for lesson material and also introduces discussions of the ethical implications of programming, including copyright law, software piracy, intellectual property, privacy, and network reliability.
- By the end of the course, students will be well prepared to take the AP® Computer Science A exam.

**An asterisk will indicate a unit of study containing sexually explicit materials per legislative definitions.*
