

Microsoft Introduction to Computer Science Syllabus

Mrs. O'Briant

2017-2018 - Subject to revision

Supplies

Pen or pencil (everyday)
1 ½ inch 3-ring binder & paper
Divider tabs for notebook
Headphones or earbuds

****Composition Book for Bellringers ****
Flash Drive for saving assignments
Box of tissues (Optional, but very much appreciated)

Course Overview

This is an introductory Computer Science course developed by Microsoft for early Secondary students. Students learn foundational CS concepts through games and apps. Students are immersed in the Touch Develop coding environment in the first unit. A strong math background is important in the field of Computer Science.

Expectations and Goals

Participation is imperative. This course requires hands-on, minds-on learning. Students are responsible for making up missed work when absent from class.

Some of the work in this course requires collaboration. Collaborative assignments will be specifically explained and assigned, and both students will put their names on collaborative work when turned in. If only your name is affixed to an assignment, then the assignment should represent your original work.

12 Units of Study

Unit #	Title	Lessons
Unit 1	Surveying the Landscape: Examining Games and How they are Made	10
Unit 2	Spinning the Globe: Use of Randomization in Games	6
Unit 3	Shifting into Gear: Controlling Game Objects	5
Unit 4	Gaining Ground: Controlling Game Flow with Events and Conditionals	5
Unit 5	Shifting into Overdrive: Using Loops and Custom Functions	6
Unit 6	Charting New Territory: Making the Game Your Own	13
Unit 7	Refueling: Adding Animation with Sprite Sheets	4
Unit 8	Riding the Momentum: Loops and Collections	6
Unit 9	Into the Great Beyond: Cloud Computing	5
Unit 10	Discovering New Horizons: TouchDevelop App Design	5
Unit 11	Traveling Safely: Privacy and Encryption	4
Unit 12	You Have Arrived: Independent Project Development	21

Grading

The grade that you earn will be made up of the following parts:

Classwork (several assignments each week) – 30%

Quizzes (after completion of each lesson) - 15%

Tests and Major Projects – 40%

Note: (Classroom projects- Some graded on completion and other projects are graded according to rubrics)

Bell Ringers (daily) 5% - these are your study guide for the Final Exam!

WorkPoints – 10%

Late Work: Deadlines are important. Deductions are made for late work according to school policy. It is the student's responsibility to check for missed work and to turn it in.

Work Points (10% of total grade)

Work Points will reflect your work ethics on a daily basis as related to a work environment. Each student will begin the nine weeks with 15 points. The student will be able to add to those points by being present in class and doing what is asked of them each day. If the student chooses not to do what they are asked to do, then a reduction of the points will be levied. The chart below describes the plus points and the minus points.

Plus Points		Minus Points	
Arriving on time	1 point daily, must have all four satisfied.	Swearing/Arguing/Insubordination	-2 for each occurrence in grading period.
Having supplies		Not Participating/Head down	
Completing Assignments		Cell Phone/Head Phone violation	
Cleaning work area		Late for Class	

Attendance

Class attendance is extremely important. Attendance will be guided by the AHS attendance policy. If you are absent, you do not earn a Work Point for that day. You are expected to attend class regularly and to make up any work missed while you were absent. **MAKE-UP WORK IS YOUR RESPONSIBILITY.** All missed assignments must be made up in a timely manner, please see me for due dates. Check Canvas for any assignments that were missed. Any absence over the 5-absence limit should be made up with me. A grade of "FF" – no credit will be received if you have 16 or more absences (minus medical waivers) Please note that waivers are normally not granted if you have not attempted to make time up in extended day first!

Cell Phones

All cell phones must be turned off and out of sight during the school day. If you have your phone out during class, I will ask you to put it away. I will only ask once before the cell phone has become an issue in class – I will refer to the AHS policy of discipline referrals.

Headphones

Headphones **only allowed for Tutorials and classwork!** There is not to be any listening to music/movies/entertainment during class time. Please do not ask if you can listen to music while you do your work, the answer will be negative.

Classroom Rules and Student Expectations

The student is expected to:

- 1. Be prompt:** You should be in your assigned seat with all materials needed for class and ready to work when the bell rings. Students should remain in their seats until the bell rings to end class unless teacher permission is granted to do otherwise. Trash, etc., can be placed in trash cans as you leave class. **It is your responsibility to keep your work area clean.**

