

<b>School Year</b>	2021- 2022	<b>Teacher Name</b>	Bobbie Bastian
<b>Office</b>	Lab 146	<b>Website</b>	Bollmantech.org
<b>Phone</b>	720-972-5859 (office) 720-972-3838 (classroom)	<b>LMS</b>	www.schoology.com
<b>Email Address</b>	Bobbie.R.Bastian@adams12.org		

<b>Course Name</b>		Introduction to Computer Science	
<b>Course Description</b>		This is a one-year introductory course to computer science. In this course students will learn the fundamentals of programming using processing, a Java-based, visually-oriented language. Students will write programs that will draw pictures, run animations, create basic algorithms, simulate basic 2D games/applications, and learn language for expressing computations - Python. Topics to be covered in this course include variables, conditionals, loops, arrays, and classes. Students will also learn how to use computational tools to help model and understand data. This course is a recommended pre-requisite to AP Computer Science A.	
<b>Unit of Study</b>	<b>Grade Level Expectations/Content Standards</b>	<b>Approximate Time Spent or Percent of time Spent</b>	<b>Targeted Date of Assessment</b>
HOC	History of Computing / Computer Science	8 days	September 2 <sup>nd</sup> - 9 <sup>th</sup>
Processing Unit 1	Introduction to Programming <ul style="list-style-type: none"> <li>• Algorithms</li> <li>• Processing &amp; Basic Shapes</li> <li>• Colors</li> <li>• Number Systems</li> <li>• More Shapes</li> </ul>	24 days	October 18 <sup>th</sup> – 22 <sup>nd</sup>
Processing Unit 2	Dynamic Drawing <ul style="list-style-type: none"> <li>• Dynamic Drawing</li> <li>• Documentation</li> <li>• Variables</li> <li>• Static or Dynamic?</li> </ul>	15 days	November 18 <sup>th</sup> -19 <sup>th</sup>
Processing Unit 3	Programming Structures <ul style="list-style-type: none"> <li>• Loops</li> <li>• Conditionals</li> <li>• Functions</li> </ul>	20 days	January 10 <sup>th</sup> – 14 <sup>th</sup>
Processing Unit 4	Program Design <ul style="list-style-type: none"> <li>• API Guide</li> <li>• Program Development Process</li> </ul>	10 days	January 28 <sup>th</sup> – 31 <sup>st</sup>
Python Unit 1	Basics in Python <ul style="list-style-type: none"> <li>• Variables</li> <li>• Conditionals</li> <li>• Iteration</li> <li>• Lists</li> <li>• Maps</li> <li>• Functions</li> </ul>	15 days	February 24 <sup>th</sup> – 28 <sup>th</sup>
Python Unit 2	Classes in Python <ul style="list-style-type: none"> <li>• Classes</li> <li>• Objects</li> <li>• Games</li> </ul>	15 days	March 28 <sup>th</sup> – April 1 <sup>st</sup>

Microcontroller Unit	<ul style="list-style-type: none"> <li>Combining hardware &amp; software to solve a problem</li> </ul>	24 days	May 9 <sup>th</sup> - 14 <sup>th</sup>
	Finals	5 Days	May 16 <sup>th</sup> – 20 <sup>th</sup>
21 <sup>st</sup> Century Skills	Workforce Readiness Skills / Leadership Development	on-going	on-going

Grading Scale		Grade Percentages/Weights	
<b>A</b>	90-100	<b>Daily Assignments</b>	<b>10%</b>
<b>B</b>	80-89	<b>Tests and Projects</b>	<b>80%</b>
<b>C</b>	70-79	<b>Participation</b>	<b>10%</b>
<b>D</b>	60-69	*Weekly progress grades are posted at <a href="https://ic.adams12.org/campus/portal/adams12.isp">https://ic.adams12.org/campus/portal/adams12.isp</a>	
<b>F</b>	59 or below		

### General Expectations

- Grades are based upon the demonstration of proficiency on units associated with a standard given during each formative or summative assessment. Formative grades in addition to summative unit assessments will be used to holistically determine your grade.
- Summative: 80%** Summative measures of achievement are taken when unit master is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.)
- 21<sup>st</sup> Century Skills: 20%** 21<sup>st</sup> Century skills include attendance, and formative assessments (participation). Formative assessments measure the scaffolding skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, paragraphs, oral check for understanding, warm-ups, stages in a large project, etc.
- Assessments will be graded based on teacher/district/state rubrics.
- On group projects, students will receive a grade for individual work and a group grade.
- Grades are based on achievement of Content Standards and Grade Level Expectations.

### Class Expectations

**Missing or incomplete assignments/assessments for this course:** Superintendent Policies 6280 Homework and 6281 Make-Up Work, will be followed for this course.

### Student Expectations

- Students are expected to enter the room **on time** with an open mind and be ready to tackle the challenge of real world thinking and problem solving as an individual and within a collaborative group.
- Students are expected to respect both people and property. This class is a community and it takes everyone in the class to achieve success.
- Students are expected to put forth their best efforts and take ownership for their learning.
- Students are expected to follow all Adams 12 Policies including but not limited to Behavior, Technology, and Internet Use.

Dear Student and Parent:

I am excited to have you/your student in Introduction to Computer Science this year! Please take a moment to review the syllabus. If you have any questions, comments or concerns about these expectations, feel free to contact me at any time. To be sure that everyone is on the same page for the start of this year, please sign the bottom of this page to verify that you understand the grading and expectations for this course, and submit by Friday, August 27, 2021.

Thank you! I am looking forward to working with you this year!

Sincerely,

Mrs. Bastian

Student Name (Printed): \_\_\_\_\_

Student Signature: \_\_\_\_\_

Parent Name (Printed): \_\_\_\_\_

Parent Signature: \_\_\_\_\_

Parent Contact Information:

Phone: \_\_\_\_\_ Email: \_\_\_\_\_ Other: \_\_\_\_\_

I most prefer to be contacted via:

Phone     Email     Other

I am interested in being a guest speaker:

Yes     No

I am interested in volunteering:

Yes     No

I am interested in being on the Computer Science Advisory Committee:

Yes     No

I am interested in being a judge for the TSA (Technology Student Association) State Conference:

Yes     No

Other comments/concerns?

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