Reynolds High School

Computer Structures

**Instructor:** Mr. Barker **Phone:** 503-667-3186 *ext.1288*

**Room:** 215 **Email:** cbarker@rsd7.net

**Course Title:** Computer Structures **Duration:** Year-long

**Required Textbooks/Materials:**

The Student---good attendance, participation & a professional, positive attitude as well as submitting all work completed and on time are a MUST to better yourself and your learning experience. All work will be done on computers in the classroom.

**Course Description:**

This course is designed as an introduction to computer programming and computer hardware. Students will use the computer programming language Python to explore the world of computer programming and game design. In hardware, students will learn how to build, upgrade, update, troubleshoot and fix computers.

**Course Requirements:**

The evaluation of projects will be ongoing and cumulative with the use of performance, daily tasks, tests, and self-report assessments. These assessments are check marks of how the students are meeting the standards set in the course and help direct the accomplishment of the project itself. Project Assessment may include but is not limited to presentations and group projects.

**Course Expectations:**

*Students will be…*

- Punctual and Prepared

- Organized

- Writers

- Engaged

- Respectful

***Extra Help:***  If you do not understand a particular topic, ASK questions in class, and come in for help immediately!  Don’t wait until it is too late!

***End of Class:***

1. Clean up after yourself – your desk and the floor around your desk

2. Return all materials to their proper places (this includes any books, classroom material, etc.)

**Grading Policy**

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| |  |  | | --- | --- | | **Letter Grade** | **Percent** | | **A** | **90% and above** | | **B** | **80-89%** | | **C** | **70-79%** | | **D** | **60-69%** | | **F** | **59% and below** | |  |

**Test Retake and Late Work Policy:**

Students will be using specialized programs and computers in the classroom. Thus, there is no expectation that work be completed at home. Late work from the first half of the semester can be turned in at any point up until the 9 week grading period. Late work from the second half of the semester can be turned in at any point up until a week before the first day of finals. While most work can be turned in late for full credit, some projects and presentations will only receive partial credit if completed late.

**Parent Vue**

Please take advantage of the Parent Vue option to track your student’s progress. If you have any questions about what appears on Parent Vue, please contact me by email or phone. For help setting up Parent Assistant please contact the main office to request a username, password and instructions.

**Classroom Rules**

1) No Food/Drink in the computer lab

2) Do not edit any arrangement of cords plugged into your computers. If you are having a problem please ask for help.

3) Stay out of the back of the room unless you are instructed to be in that space (or you ask to see something)

4) If you complete all of the day’s work before the class period is over, and you have no other missing work for this class, you may work on something else for the remainder of the period. You MAY NOT, however, complete work for another class before completing your work for this class.

5) “Look, don’t touch.” Do not use/handle tools and hardware around the room unless you have been given express permission to do so.

**Units Covered**

1. Computer Hardware
   1. Understanding Computer Components
   2. Computer Build Project
2. Computer Software
   1. Understanding Operating Systems
3. Game Design with Scratch
   1. Building a platform game
4. Programming with Python
   1. Variables
   2. if/else
   3. Scoring
   4. User Input
   5. elif
   6. Functions
   7. Game Design