# Intro to Computer Science

Instructor:  Megan Minich                    Rm. 101              Email: mminich@tidioutecharter.com

**Course Description:**  INTRODUCTION TO COMPUTER SCIENCE. Introduction to the central ideas, practices and impact of computer science and computational thinking. Covers the seven big ideas in computer science: creativity, abstraction, data and information, algorithms, programming, the internet and global impact. Computational thinking practices: connecting computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating.

**Student Learning Goals:**
Using a project based learning environment, by the end of the course, students will successfully complete the following learning objectives:

- Website Development
- Interactive Animations and Games
- Cyber Security and Society
- Basic Coding
- Robotics
- Artificial Intelligence

**Class work:**

- Students will have the opportunity to complete many assignments in class in the form of weekly reflections and questions, individual or group projects, research, collaborative problem-solving, notebook check or any other work that is to be completed in class.
- Quizzes and Tests are to measure student mastery of computer science terms. Students may follow their own progress and success.
- Frequently, students will work in groups to complete projects according to the information sheets provided with each project. These will include presentations, posters, designs, and final products.

**Materials**
- Pen/Pencil
- File Folder
- 80(+) page spiral notebook for taking notes/journaling
- Headphones
- Wireless mouse (can be provided)

**Major Projects**

- This class is designed with project based learning. There will be several projects throughout the year and will make up 60% of the graded work.
    - **Projects must be submitted by midnight the day they are due. Late programs are subject to a deduction of 10% every 2 days from the maximum possible score (e.g. a perfect program is worth 100 points if submitted before midnight and is only worth 90 points at 12:00 AM the second day). Projects will not be accepted more than 4 days late.**

**Reading Assignments and Reflections**
During the course of the class students will be asked to provide reflections on current events, career professionals or questions asked during the class. Reflections will be graded weekly.

**Reading Assignments and Reflections will be due by midnight on every Friday. Students will have until Friday to finish their reflections for the week. Late submissions will not be accepted.**

**Homework**
Students will develop several small programs and run experiments throughout the year to enhance their understanding. The majority of the work will be done in the classroom

**Genius Fridays**
We will have Genius Fridays every other week. If students are caught up on work, have everything turned in and have no questions, students will have the chance to participate in fun activities such as games, coding hour, exploring computer science. If students do not have work complete this Friday will give them a chance to get caught up and have extra support in class

**Grading Procedures:** The grade distribution is as follows: Class work/ Participation: 20% Tests: 20% Projects: 60%

- A – 90% and above
- B – 80% -89%
- C – 70% - 79%
- D – 60%- 69%
- F – 59% and below

**Classroom Rules:**
- Respect yourself
- Respect your fellow students' right to learn
- Respect the teacher's right to instruct
- Respect the school / classroom equipment.
- No cell phones are permitted unless it is approved for classroom learning.
- HAVE FUN!

**Academic Honesty**

Students are expected to work on their own unless explicitly instructed otherwise. Students who copy from each other or from any other source on assignments will be considered to be cheating as will students who allow their work to be copied. This includes trying to find answers to problems or programs from the Internet or other sources (and uploading your completed assignments to Internet sites that are publicly accessible).

**Additional Instruction:**

Students in need of tutoring or extra help are welcome to schedule a time to meet with the teacher.

Introduction to Computer Science

By signing below I have read and fully understand the class requirements and guidelines.

Student Name:

_____

Student Signature

_____

Parent/Guardian Signature

_____