Robotics Programming & Business Computer Applications

Instructor:
Todd Sparrow
Tuition: ***

\$90: per semester class due at registration

Credit:

1/2 credit per semester

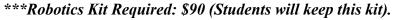
Homework:

2-3 hours per week

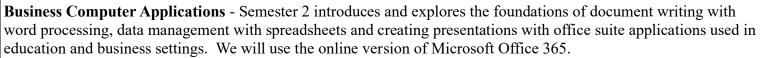
Robotics Programming – This course explores the world of robotics using Edison, a small self-contained robotic learning platform. This course introduces students to several ways robots sense the environment through light, sound, and vibration using sonar, infrared emitters and detectors and light

detection. Students will program their robots using web-based programming languages using both drag-and-drop tools including Scratch to advanced techniques with Python. Students will learn the basic programming structures of statements, variables, loops and more. Textbook: All text for lessons, exercises and projects will be available on

Textbook: All text for lessons, exercises and projects will be available on the online class portal. In-class assignments and worksheets will be handed out each week.



I will order class robotics kits in a group purchase.



Textbook: Workplace Software and Skills (Free download openstax.org)

ISBN: 978-1961584310

Requirements and Expectations:

These courses are for 8th-12th grade. High school credit is only available for 9th-12th. No previous programming experience is necessary. Students must have reliable internet access at home and access to a printer to complete this course. High-speed internet is recommended for installation and usage of all course software. Students should be progressing towards a minimum touch-typing rate of 20 wpm.

Supplies:

***Robotics Kit: \$90 (Students will keep this kit) - Robotics class only Compatible** Laptop: (non-Chromebook) with WiFi.

Software:

Microsoft Office 365 Online (a free student account will be provided during the course)

Visual Studio Code (free download)

(** see requirements for full details)



** The full listing of the laptop requirements can be found by visiting: https://wlink.to/ceectech

^{*} Each course will satisfy .5 of the 3 elective credits required for graduation in Tennessee. The combined courses will satisfy the full Tennessee computer science credit required beginning in the 2024/25 school year.