Applied Technology Lab

WASHINGTON COMMUNITY HIGH SCHOOL

INSTRUCTOR: Mr. Robert Mitchell

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COURSE DESCRIPTION

This is an introductory course designed to expose students to general industrial technology concepts, processes, and systems. The students will use hands-on activities in various units called modules. Students will use cooperative learning and self-directed learning in modular lab workstations with computers, a/v equipment, and high-tech lab equipment and supplies. Students will choose five of these modules: 3D Modeling, 2D computer animation, electronics, engineering, flight transportation, materials and processes, residential wiring, robotics, and small gas engines. NOTE: This course may be repeated one time for credit for more experience and exploration (five additional modules can be completed).

CLASS FORMAT

The course is divided into 2 instruction types, modules and lessons. During module days students work independently at module stations; on lesson days the class meets as a whole to explore safety procedures, careers, and problem solving.

COURSE GOALS

Each individual module has its own objectives and outcomes and are discussed when the modules are chosen. The goal of the class is that the student is exposed to an alternative learning environment where they can begin to identify specific interests in the technology field. Students will also participate in activities that will develop their engineering and problem solving skills. Career discovery activities will enlighten students to opportunities in vocational and engineering fields.

OUTLINE

Weeks 1-2 – Introduction to ATL and lab safety

Weeks 3-18 – Modules; career and problem solving units in between modules

(Instructor reserves right to adjust content and schedule)

MATERIALS

- a. 2 pocket folder (provided)
- b. Pencils

GRADING

Modules (5 @ 200) 1000 pts

Problem Solving Activities (3) 250 pts

Career Discovery Activies (2 @ 50) 100 pts

Participation (3 pts/day) 250 pts

Comprehensive Final Exam 10%

CLASSROOM EXPECTATIONS

- All WCHS Handbook policies apply
- Respect the educational rights of all students
- No food or drink in the lab
- Personal digital devices are not allowed during instruction days. No headphones at any time, except for the consumption of course material.
- Arrive prepared for class.

B. SUGGESTIONS FOR SUCCESS

This course will demand your creativity, attention, and ability to work with others. In order to succeed you should follow these instructor suggestions:

- Be open to new learning methods.
- Read instructions carefully.
- Use knowledge you have gained in courses in other subjects (Math, Science).
- Ask questions. Give feedback.
- Attend class.