Introduction to the Tech Lab Modules

Saline High School

What is a Module?

- A module is a self directed Multimedia presentation about a technology topic.

- Work in teams of 2

- Lots of Information, hand's on activities, and FUN!

There are 7 Modules to Choose

- Fiber Optics & Lasers
- Robotics
- Fluid Power
- Exploring Mechanisms
- Alternative Energy
- CAD
- CNC Mill

CAD Module

- The Computer Aided Design Module teaches students about the role CAD plays in the creation of buildings, vehicles, appliances and industrial equipment.

- You will draw – speakers, floppy disks, mountain scene and more.

Fiber Optics and Lasers

- Fiber Optics and Lasers module teaches students about basic concepts of these communication technologies.

- Experiments include Morse code, voice and radio transmission, as well as Laser experiments.

Fluid Power

- Students will explore the world of Fluid Power (hydraulic and pneumatic systems)

- Hands on experiments in buoyancy, pressure, surface tension and pneumatic systems.

Automation and Robotics

- Students study the growing impact robotics has on industry and our lives .

- Hands-on experiences, programming and operating a robot and adding peripherals.

Exploring Mechanisms

- Introduces the scientific concepts and components that make machines work.

- Many hands on activities with the mechanical power trainer making simple machines.

Alternative Energy

- Students explore alternative sources of energy through multimedia activities and experiments.

- Explore solar power, wind energy, static electricity and many more!

CNC Mill

- Students will be introduced to the world of manufacturing and how computer numerical control (CNC) machining makes it productive.

- Students learn how to program and operate the mill.

What's next?

- Sit next to your partner.

- Pick your top 4 favorite modules.

- When your name is called, pick up a Module Packet and head back to your seat.

Module Packets

- These are your guide to the module.

- Get things signed off after you have completed the activity. I need to see it to give credit!

- Fill out the daily log at the end of the day and place in the IN BOX.

BEING SUCCESSFUL IN MODULE ROTATIONS

- Use time **wisely**! Take notes!
- Stay on task!
- Use the **"Module Problem Solving Model"**.
    - **READ** the information carefully. Read for understanding.
    - **RE-READ** the information if you don't understand it.
    - **DISCUSS** the information with your partner to see if that helps you understand the information.
    - **TRY** to **do** something with the information.
- If that doesn't work ask the instructor for help.
- Don't ask the teacher for help until you have DONE something.

Day 1

- Goal
  - To complete Lesson #1

- You will be logging in and taking a Pre Test.

- Please take notes each day of the module.

Day 2

- Goal –
  - To complete at least Lesson 2 and 3
  - If you get ahead – no problem

- Remember to get lesson activities checked off as required in the Module Packet

Day 3

- Goal
  - To complete Lesson 4 and 5
  - If you are ahead – no problem

- Remember, the POST TEST is tomorrow – be ready!

Day 4

- Goal –
  - Complete Lesson 6 and 7 today.
  - Take the POST TEST
- The Career Activity won't print. Don't worry!
- **Skip today's Activities (not lessons) and save for after the test**
- The POST TEST is OPEN NOTE
- Take this Individually (separate from your partner)