



School District of Marshfield Course Syllabus

Course Name: DC Machine Tool Theory PS

Length of Course: Semester

Credit: 1/2 Credit

Program Goal:

Empower learners to be college and career ready through standards-based experiences in the classroom and career-based learning experiences with business and industry partners.

Learners will engage through technology in design, building, problem-solving, repair or service, in a collaborative environment through theory and hands-on experiences.

Course Description:

Machine Tool Theory is a class for learners that are serious about furthering their machining knowledge and skills. Whether your plans are to pursue a career as a machinist, or just improve your quality of work, this class might be for you. Students will learn shop safety, machine print reading, and work on skills using a metal lathe, milling machine, drills, and various cutting tools. You will spend the majority of the time on the machines with guided instruction, while working towards industry competencies. This class is for learners that are self-motivated and respond well to constructive criticism. No prior machine shop experience is necessary.

MSTC Course Title: Introduction to Turning Machines

Course Number: MSTC 32-420-326

Total Credits: 2

Technical College Learning Outcome and Competencies:

Course Competencies

- Demonstrate safe work practices in the shop.
- Determine measurement using selected tools.
- Interpret drawings for machining purposes.
- Incorporate non-precision layout techniques for machining.
- Demonstrate proper cutting tool metal removal techniques.
- Practice safe operation of lathe for metal cutting.

Program Outcomes

- Apply basic safety practices in the machine shop (TSA)
- Interpret industrial/engineering drawings (TSA)
- Apply precision measuring methods to part inspection (TSA)
- Perform basic machine tool equipment set-up and operation (TSA)
- Perform programming, set-up, and operation of CNC Machine Tools (TSA)
- Perform advanced CNC machining operations (TSA)

Primary Resource(s):

ToolingU Online