

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: MET-101 Department: Mechanical Engineering
Technology
Course Title: Introduction to Mechanical Engineering Technology Semester: Fall Year: 2016

Objectives/Competencies

Course Objective	Competencies
1. Demonstrate an intermediate level of knowledge of engineering drawings.	<ul style="list-style-type: none">• Line conventions pertaining to print interpretation.• Title blocks & parts lists.• Geometric terms and conventions.• Multiview drawings• Sections views• Auxiliary views• Screw thread representation• Dimensioning• Tolerancing• Machining specifications & drawing notes.• Surface Texture Symbols• Drawing revision systems• Detail and assembly drawings• Welding prints

Course Objective	Competencies
<p>2. Demonstrate the ability to inspect machined parts by using engineering drawings to determine inspection points.</p> <p>3. Demonstrate the ability to present data such as formula outputs and graphs in Excel.</p> <p>4. Demonstrate team work, writing and presentation skills by creating a 3D printed project.</p>	<ul style="list-style-type: none"> • Interpret an engineering drawing for dimensional accuracy. • Use basic measurement devices such as rulers • Use traditional measuring devices such as dial calipers and micrometers. • Solve algebra problems • Solve trigonometry problems • Use Excel for problem solving. • Demonstrate computer software basics: (systems, applications, and productivity) with respect to getting a file from conception to the 3D printer. • Learn to work in a team. • Demonstrate written and oral presentation skills