

**Pacing Guide 18 Week Course**  
**Daniel Boone High School : Career and Technical Education**

**Course: MEP Systems**

<b>WEEK</b>	<b>STATE STANDARDS</b>	<b>MAIN TOPICS</b>
1-3	Standard 1-3	<ul style="list-style-type: none"><li>• Identify safety hazards on a Jobsite and demonstrate practices for safe working</li><li>• Maintain safety records and demonstrate adherence to industry-standard practices</li><li>• Follow procedures to work safely around materials.</li><li>• OSHA 10 certification.</li></ul>
4-5	Standard 4	<ul style="list-style-type: none"><li>• For each of the systems covered in this course, identify and select the proper tools and accessories. Use the tools to accomplish the desired tasks</li></ul>
6	Standard 5-7	<ul style="list-style-type: none"><li>• Opportunities within the HVAC, electrical and plumbing industries.</li><li>• Explain what an apprenticeship is, referencing data from the U.S. department of labor and other sources. On the job training paired with related training for individuals seeking construction careers.<ul style="list-style-type: none"><li>• Research</li></ul></li></ul>

		apprenticeships
8	Standard 8-9	<ul style="list-style-type: none"> <li>• Roles and responsibilities among construction trades. How electricians, plumbers, and HVAC technicians coordinate work with other construction personnel to complete the project</li> <li>• Explain inspection procedures used to enforce building codes.</li> </ul>
9	Standard 10	<ul style="list-style-type: none"> <li>• Apply mathematics concepts to solve HVAC, electrical, plumbing problems</li> <li>• Operating with the whole numbers, fractions, and decimals.</li> <li>• Pythagorean theorem</li> </ul>
10-12	Standard 11-16	<ul style="list-style-type: none"> <li>• OSHA standards and other regulations specific to job site electrical safety. And OSHA standards, apply lockout/tagout procedures.</li> <li>• Examine basic electrical circuits and components. Electrical circuits (series,parallel, and series parallel circuits). Define voltage, resistance, current. Ohm's law</li> <li>• Apply Ohm's law and Kirchhoff's laws.</li> <li>• Knowledge of basic electrical circuits.</li> <li>• Composition and properties of conductors.</li> </ul>

		<ul style="list-style-type: none"> <li>Procedures necessary to safely replace or install electrical devices.</li> </ul>
13	Standard 17-19	<ul style="list-style-type: none"> <li>Safety considerations specific to plumbers.</li> <li>Movement of potable water and waste.</li> <li>Plumbing codes</li> </ul>
14	Standard 20-22	<ul style="list-style-type: none"> <li>Pipe fitting</li> <li>Material properties like plastic piping</li> <li>Safely measure, cut, ream, and join plastic piping and fittings.</li> </ul>
15-16	Standard 23-26	<ul style="list-style-type: none"> <li>Safety considerations specific to HVAC technicians</li> <li>Describe the basic components included in an HVAC system.</li> <li>Fundamental concepts of heating and combustion.</li> <li>Types of heat transfer</li> </ul>
17	Standard 27	<ul style="list-style-type: none"> <li>Inspect and interpret a full set of construction drawings. Floor plan, elevation, and detail drawing.</li> </ul>
18	Standard 28-29	<ul style="list-style-type: none"> <li>Clear communication among internal and external parties on a job site.</li> <li>Log daily activities complete during a project</li> </ul>