

**DENVER PUBLIC SCHOOLS**  
**CAREER AND TECHNOLOGY CURRICULUM PACING AND PLANNING**

**SYLABUS for: CTE CAD/Drafting Technology 3**

**Course: 7070 AA**

| Standards  | Objectives  | 1-6 wks<br>or<br>1-4 wks | 7-12 wks<br>or<br><block> | 13-18<br>wks or<br>5-9 wks |
|--|---|--------------------------|---------------------------|----------------------------|
| <p>Standard 1: The student will understand and utilize multiple, modern communication systems.</p> <p>1.1 Read, interpret, and create drawings using universally accepted drawing conventions and standards.</p> <p>1.2 Use sketching techniques, conventional drawing instruments and computer-aided drawing systems to produce drawings.</p> <p>1.5 Research a variety of career clusters and understand the evolving career opportunities within communication oriented careers.</p> <p>Standard 5: The student will demonstrate the use of lifelong safety habits in the use of machines, tools, and processes in all their endeavors</p> <p>5.1 Demonstrate safe use of lab tools, equipment, and supplies.</p> <p>5.2 Demonstrate the practical application of safety practices that can be used in everyday life.</p> | <p>Define basic engineering drawing terminology. (1.1)</p> <p>Understand concepts of basic drafting. (1.1)</p> <p>Apply dimensioning practices and tolerancing according to current standards. (1.1)</p> <p>Understand, identify, and correctly use the techniques, tools, and equipment. (1.1)</p> <p>Understand concepts of mechanical drafting. (1.1)</p> <p>Develop an object graphically using appropriate projectioning. (1.1)</p> <p>Determine the scale of the view or section. (1.2)</p> <p>Operate and adjust input devices (e.g., mouse, keyboard, scanner). (1.2)</p> <p>Operate and adjust output devices (e.g., printers, plotters, data transfer). (1.2)</p> <p>Identify and use data storage, retrieval and back-up systems. (1.2)</p> <p>Determine the scale of the view or section. (1.2)</p> <p>Draw a stretch-out line; draw a stretch-out of figures. (1.2)</p> <p>Determine categories of jobs in the communication field, which includes drafting, architecture, and technology. (1.5)</p> <p>Investigate requirements for specific positions, training required, opportunities in the future, and potential earnings. (1.5)</p> <p>Pass a required written general safety test with a score of 100%. (5.1)</p> <p>Pass a required written equipment-specific safety test with a score of 100%. (5.1)</p> <p>Learn and follow rules of safety for the Industrial Technology classes. (5.1)</p> <p>Demonstrate safe use of lab equipment (basic and advanced). (5.1)</p> <p>Understand that their safety or lack of safety impacts self and others. (5.1)</p> <p>Comply with established safety practices. (5.2)</p> <p>Inspect material/equipment/fixtures for defects. (5.2)</p> <p>Operate equipment in a safe, prescribed manner. (5.2)</p> <p>Respond to emergencies in the appropriate manner. (5.2)</p> <p>Describe ergonomics and its importance. (5.2)</p> |                          |                           |                            |

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|  | Use electrical devices correctly and safely. (5.2)<br>Keep marked aisles clear of equipment and materials. (5.2) |  |  |  |
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| DPS Standards   | Objectives  | 1-6 wks<br>or<br>1-4 wks | 7-12 wks<br><block> | 13-18<br>wks or<br>5-9 wks |
|---|---|--------------------------|---------------------|----------------------------|
| <p><b>READING &amp; WRITING</b><br/> <b>STANDARD 1:</b> Students read and understand a variety of materials.</p> <p><b>STANDARD 2:</b> Students write and speak for a variety of purposes and audiences.</p> <p><b>STANDARD 4:</b> Students apply thinking skills to their reading, writing, speaking, listening, and viewing.</p> <p><b>STANDARD 7:</b> Students use appropriate technologies to extend comprehension and communication skills in reading, writing, speaking, listening, and viewing.</p> <p><b>MATHEMATICS</b><br/> <b>STANDARD 4:</b> Geometric Concepts:</p> <p><b>STANDARD 6:</b> Computation:</p> <p><b>STANDARD 7:</b> Technology:</p> <p><b>SCIENCE</b><br/> <b>STANDARD 2:</b> Physical Science:</p> | <p>2.1 Expand vocabulary development using a variety of methods such as synonyms, antonyms, metaphors, and similes.</p> <p>2.2 Write and speak for a variety of purposes such as telling stories, presenting analytical responses to literature, conveying technical information, explaining concepts and procedures, and persuading.</p> <p>2.4 Plan, draft, revise, proofread, edit, and publish written communication.</p> <p>4.2 Use reading, writing, speaking, listening, and viewing to gather data, define the problem, and apply problem-solving skills.</p> <p>7.2 Use appropriate technologies to access, process, and communicate information for a variety of purposes.</p> <p>7.3 Demonstrate problem solving skills through the use of appropriate technologies.</p> <p>Students develop spatial sense and use geometric concepts, properties, and relationships in problem-solving situations and communicate the reasoning used in solving these problems.</p> <p>Students link concepts and procedures as they develop and use computational techniques, including estimating, mental arithmetic, paper-and-pencil, calculators, computers, and other manipulatives in problem-solving situations and communicate the reasoning used in solving these problems.</p> <p>Students understand and use appropriate technologies to perform mathematical constructions and computations, simulate mathematical experiences, and to access, process, and communicate information related to the application of mathematics in problem-solving situations.</p> <p>Physical Science: Students know and understand common properties, forms, and changes in matter and energy.</p> |                          |                     |                            |