



Dyersburg High School
 Career and Technical Education
 Instructor: Robert Jackson
 Email: rjackson@dyersburgcityschools.org

Welding I & II Pacing Guide First Semester

1 st Quarter	TN Standards	Lesson Focus	Additional Notes
Week 1	STANDARDS 1,2 SAFETY	1.0 Students will assume responsibility for the safety of themselves, their coworkers, and bystanders.	Welding Safety
Week 2	STANDARDS 1,2 SAFETY	1.1 Demonstrate a positive attitude regarding safety practices and issues. 1.2 Use and inspect personal protective equipment.	Safety Practices
Week 3	STANDARDS 1,2 SAFETY	1.3 Inspect, maintain, and employ safe operating procedures with tools and equipment, such as hand and power tools, ladders, scaffolding, and lifting equipment. 1.4 Demonstrate continuous awareness of potential hazards to self and others and respond appropriately.	Equipment Safety
Week 4	STANDARDS 1,2 SAFETY	1.5 Assume responsibilities under HazCom (Hazard Communication) regulations. 1.6 Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies to protect coworkers and bystanders from hazards.	Safety Standards
Week 5	STANDARDS 1,2 SAFETY	1.7 Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents and observed hazards and regarding emergency response procedures. 1.8 Demonstrate appropriate related safety procedures. 1.9 Pass with 100 % accuracy a written examination relating to safety issues	Safety



Dyersburg High School
 Career and Technical Education
 Instructor: Robert Jackson
 Email: rjackson@dyersburgcityschools.org

Week 6	STANDARDS 1,2 SAFETY	1.10 Pass with 100% accuracy a performance examination relating to safety. 1.11 Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.	Safety Test
Week 7	STANDARD 3 CAREER EXPLORATION	Workplace Readiness Skills: Personal Qualities and People Skills	Skills
Week 8	STANDARD 3 CAREER EXPLORATION	Workplace Readiness Skills: Professional Knowledge and Skills Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the workplace	Professional Knowledge
Week 9	REVISIT STANDARDS		
End of 1st Quarter			
2nd Quarter	TN Standards	Lesson Focus	Additional Notes
Week 1	STANDARD 3 CAREER EXPLORATION	Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.	Team work
Week 2	STANDARD 3 CAREER EXPLORATION	All Aspects of Industry	
Week 3	STANDARD 11 PROPERTIES OF METAL STANDARD 4,5 INTERPRETING AND CREATING DRAWINGS	Research the following mechanical properties of metals and their importance in the welding process. a. Tensile b. Strength c. Hardness d. Elasticity e. Ductility f. Toughness g. Brittleness	Metal Strength
Week 4	STANDARD 11 PROPERTIES OF METAL	Welding different metals	
Week 5-9	STANDARD 6,7 WELDING DESIGN LAYOUT	Welding Practices	



Dyersburg High School
 Career and Technical Education
 Instructor: Robert Jackson
 Email: rjackson@dyersburgcityschools.org

End of 2nd Quarter			
End of 1st Semester			

Welding I & II Pacing Guide Second Semester

3 rd Quarter	TN Standards	Lesson Focus	Additional Notes
Week 1	STANDARD 3 CAREER EXPLORATION	Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the workplace.	Reading
Week 2	STANDARD 3 CAREER EXPLORATION	All Aspects of Industry	reading
Week 3	STANDARD 8, 9 ARCH WELDING	Demonstrate General Welding Techniques	Welding
Week 4	STANDARD 8, 9 ARCH WELDING	Explain the theories behind SMAW, GMAW, GMAW-S, FCAW-G, GTAW, OFC, OFC Track Burner, CAC-A, and PAC.	Welding GMAW
Week 5	STANDARD 9,10 ARCH WELDING	Explain the theories behind SMAW, GMAW, GMAW-S, FCAW-G, GTAW, OFC, OFC Track Burner, CAC-A, and PAC.cac	SMAW
Week 6	STANDARD 9,10 ARCH WELDING	Explain the theories behind SMAW, GMAW, GMAW-S, FCAW-G, GTAW, OFC, OFC Track Burner, CAC-A, and PAC.	Cac Machine
Week 7	STANDARD 11 PROPERTIES OF METALS	Set up for shielded metal arc welding operations and base metal preparation on carbon steel.	
Week 8-9	STANDARD 12,13 PROPERITIES OF METALS	Operate shielded metal arc welding equipment.	Mig welding



Dyersburg High School
 Career and Technical Education
 Instructor: Robert Jackson
 Email: rjackson@dyersburgcityschools.org

End of 3 rd Quarter			
4 th Quarter	TN Standards	Lesson Focus	Additional Notes
Week 1	STANDARD 14,15 QUALITY CONTROL	Demonstrating Visual Examination Principles and Practices	Practicing welding
Week 2	STANDARD 14,15 QUALITY CONTROL	100% welding	Testing
Week 3	STANDARD 14,15 QUALITY CONTROL	100% stick welding	Testing
Week 4	STANDARD 14,15 QUALITY CONTROL	100 % mig welding	Testing
Week 5	STANDARD 14,15 QUALITY CONTROL STANDARD 4,5 INTERPRETING AND CREATING DRAWINGS	ARCHITECTURAL SCALE AND READING S	
Week 6	STANDARD 14,15 QUALITY CONTROL	Quality welds Drawing upon multiple resources, research and write a text explaining the relationship between discontinuities and defects. Describe various examples of defects found in welded products. Also identify and explain both destructive and nondestructive tests used as quality control techniques to prevent manufacturing defects in welding. Compare and contrast these techniques and provide specific examples when they are most appropriately used. Cite evidence to justify the examples.	
Week 7	STANDARD 14,15 QUALITY CONTROL	ASME Measure and visually inspect welded products for acceptability to American Welding Society QC- 10 standards. Record discontinuities and defects, and compare data to given project specifications using class-defined analysis methods. Interpret and communicate results both written and verbally. If necessary, recommend changes that will reduce the number of product defects during the manufacturing process	



Dyersburg High School
Career and Technical Education
Instructor: Robert Jackson
Email: rjackson@dyersburgcityschools.org

	Week 8	REVIST STANDARDS	Welding in the shop	practice
	Week 9	REVISTI STANDADS	Welding Defects	Checking welds
	End of 4th Quarter			
	End of 2nd Semester			