DISTRICT NAME:

CTE Course Description and Standards Crosswalk

Course Information	
Course Name	Metals Processes 2
Course Number	II770
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Construction Management Engineering
Date of district Course Revision	November 2013
Career & Technical Student Organization (CTSO)	
CTSO embedded in this sequence	Skills USA
Occupational Standards	
Source of Occupational Standards	Skills USA, American Welding Society (AWS), NIMS
Names/Numbers of Occupational Standards	Skills USA Welding
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Metal Processes 2 is a course for students who want to further pursue their interest in working with metal. Advanced hot and cold metal working processes and techniques will be covered in this class.
Instructional Topic Headings (please separate each heading by a semi-colon)	Safety and health, Tools and equipment, Working Drawings, Heat treatment, Metal machining, Layout Project Construction, Career opportunities.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	Y
Course addresses:	
New Alaska ELA and Math Standards	Y
Alaska Cultural Standards	Y
All Aspects of Industry (AAI)	Y
Core Technical Standards	Y
Employability Standards	Y
Employability Standards	

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Source of Employability Standards	
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	N
Date of Current Agreement	
Postsecondary Institution Name	
Postsecondary Course Name	
Postsecondary Course Number	
# of Postsecondary Credits	

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Additional CTE Course Information

Author	
Course developed by	KPBSD
Course adapted from	Previous Version
Date of previous course revision	Nov. 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
1. Demonstrate safe shop procedures in all metal processes.	AWS-EX 1.2.1 NCCER – Core #1	MN-3 MN-HSE-1 MN-MIR-2 MN-PRO-5			C3	A6	HSE	Pre / Post Test
2. Identify and properly use all tools and equipment in metal working processes.	HPM 37.MF.11	MN-6			B4	A2, A6	TP	Lab Assignment
3. Demonstrate the ability to read and apply technical drawings.	AWS 1.2a NCCER – Core #5	MN-6			B4	A2, A5	TP	Lab Assignment
4. Define heat treatment processes utilized in metalworking.		MN-6 MN-PPD-1 MN-PRO-5			B4	A2, A6	TP	Written Paper
5. Identify and utilize the steps in machine tooling.	KSAO 8.4	MN-6		M2.4.1-4	B4	A2, A6	TP	Lab Assignment

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Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
		MN-PPD-1 MN-PRO-5						
6. Employ specific metal machining techniques.	MS2 10.2.b	MN-6 MN-PPD-1 MN-PRO-5		M2.4.1-4	B4	A2, A6	TP	Lab Assignment
7. Demonstrate proficiency in using metal layout and techniques.		MN-6 MN-PPD-1 MN-PRO-5		M2.4.1-4	B4	A2, A6	TP	Lab Assignment
8. Demonstrate project fabrication and repair utilizing various metal processes.		MN-6 MN-PPD-1 MN-PRO-5		M2.4.1-4	B4	A2, A6	TP	Lab Assignment
9. Employ finishing techniques for metal projects.	MS2 10.2.b	MN-6 MN-PPD-1 MN-PRO-5			B4	A2, A6	TP	Lab Assignment
10. Explore and identify careers in metal processes.		MN-4		M10.4.2	B4	A2, A3, A5	L, PWH, C	Oral Report

Instructional Resources

List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)

METALWORK Technology and Practice by Repp & McCarthy, Glencoe Publishing, 1989

NCCER: Http://www.nccer.org

DISTRICT NAME:

AWS: http://www.aws.org/w/a/certification/index.html

NIMS: National Institute for Metalworking Skills, Inc**.: https://www.nims-skills.org/web/nims/home**

SkillsUSA: http://www.Skillsusa.org