DISTRICT NAME:

CTE Course Description and Standards Crosswalk

Course Information	
Course Name	Welding 3
Course Number	II960
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	A & C, Manufacturing and Transportation
Date of district Course Revision	Nov. 20, 2014
Career & Technical Student Organization (CTSO)	
CTSO embedded in this sequence	SkillsUSA
Occupational Standards	
Source of Occupational Standards	American Welding Society (AWS)
Names/Numbers of Occupational Standards	Certified Welder-AWS
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Welding 3 will emphasize SMAW (Shielded Metal Arc Welding) and give the student a beginning level of exposure to aluminum welding operations and introduction to project fabrication. Students will mentor and supervise the demonstration of inexperienced/beginning welding students. The NCCER "Basic Safety" Core will be taught in this class. Safe equipment use and processes will be covered.
Instructional Topic Headings (please separate each heading by a semi-colon)	Safety and health; Tools and equipment; Blue print reading; Layout; Metallurgy; Shielded metal arc processes; Fabrication manufacturing; Welding careers
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

DISTRICT NAME:

Employability Standards	Y
Employability Standards	
Source of Employability Standards	State of Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	April 2014
Postsecondary Institution Name	UAA Kenai Peninsula Campus
Postsecondary Course Name	Gas and Arc Welding
Postsecondary Course Number	Weld A101
# of Postsecondary Credits	4

Additional CTE Course Information

Author	
Course developed by	KPBSD
Course adapted from	Previous Version
Date of previous course revision	Nov. 2012
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 practices for self and	AWS	MN-3			C3, B2 ,	A6, A1	Health /	Pre / Post

DISTRICT NAME:

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
others. (A6)	1.21	MN-HSE-1 MN-MIR-2 MN-PRO-5			B3, D6		Safety	Test
2. Identify and properly use welding tools and equipment for each welding process	AWS-AD 1.5.34	MN-6 MN-HSE-1 MN-MIR-2	R.4.9-12 R.3	N-Q.1,3 G-CO.1	B4, D6	A2, A1, A6	Health/Safety, Technical Production Skills	Lab Assignments
3. Utilize measurements and measuring devices.	AWS-AD 1.6.4		R.3 R.4 W.6	N-Q.1,3 G-CO.1 G-MG.1,3	B2, C4, D6	A2, A5, A6, B1, B2	Technical Production Skills	Lab Assignments
4. Introduction of gas tungsten arc welding procedures (GTAW).	AWS 1.3.4		R.3 R.4		D6	A2, B2	Principals of Technology	Lab Assignments
5. Demonstrate project fabrication or repair utilizing the various welding techniques and layout procedures.	AWS-EX 1.1.7d		R.3 R.4 W.6	N-Q.1,3 G-CO.1	B2	A2	Technical Production	Pre / Post Test
6. Identify metal properties and the metallurgy of a weld bead.	AWS-AD 1.8a		R.4		B1, B2	M2.4.1-4 R4.2, 4.4	D6	Technical Production Skills, Principals of Technology
7. Evaluate and discuss possible welding careers. (B2)		MN-1 MN-4	W.1-ABC W.2-ABC		B2B2, D6	A4 B5 A3 B2 B3 B4	All Aspects	Lab Assignments
8. Demonstrate the shielded metal arc welding process.	AWS-AD 1.101d		R.3		C3, B2 , B3, D6	A6, A1	Health / Safety	Lab Assignment

DISTRICT NAME:

Instructional Resources

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

Welding Technology Fundamentals 4th edition, author Bowditch, copyright 2010 (text book)

NCCER: http://www.nccer.org

http://www.youtube.com

American Welding Society: http://www.aws.org/certification/CW/