

## CTE Course Description and Standards Crosswalk

### Course Information

|  |                                       |
|--|---------------------------------------|
| Course Name  | Construction Trades Part 1 Semester 1 |
| Course Number  | 86131                                 |
| Number of High School Credits  | 1                                     |
| Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.) | Architect, Cabinetry, Carpenter       |
| Date of district Course Revision   | February 2015                         |

### Career & Technical Student Organization (CTSO)

|                                |            |
|--------------------------------|------------|
| CTSO embedded in this sequence | Skills USA |
|--------------------------------|------------|

### Occupational Standards

|   |   |
|---|---|
| Source of Occupational Standards        | National Center for Construction Education and Research (NCCER); Skills USA |
| Names/Numbers of Occupational Standards | NCCER; SkillsUSA  |

### Registration Information

|   |   |
|---|---|
| Course Description (brief paragraph – as shown in your student handbook or course list) | Construction Trades—Part 1 introduces the concepts of residential construction by providing hands-on training to students who will learn about safety, hand power tools, and materials. Students will build footings, frame walls, and apply siding, roofing and trim. All of the work is done “in the field” on a job site of a marketable residential home.   |
| Instructional Topic Headings (please separate each heading by a semi-colon)             | Personal Safety and Job-Site Conditions; Hand and Power Tool Safety; Identification, Use and Care of Tools; Construction Materials—Identification and Use; Construction Drawing Reading and Construction Math; Materials Handling; Excavation and Site Work; Footings and Foundations; Framing Concepts—Floors, Walls, Roofs; Exterior and Interior Finishes—Siding, Roofing, Trim; Stairway Construction; Career and Technical Student Organization (CTSO) Involvement |

### Summative Assessments and Standards

|                                   |  |
|-----------------------------------|--|
| Technical Skills Assessment (TSA) | NCCER  |
| Course addresses:                 | Safety, Tools (Power and Hand Held), Communication, Math |
| New Alaska ELA and Math Standards | Yes  |
| Alaska Cultural Standards         | Yes  |
| All Aspects of Industry (AAI)     | Yes  |
| Core Technical Standards          | Yes  |
| Employability Standards           | Yes  |

### Employability Standards

|                                   |                 |
|-----------------------------------|-----------------|
| Source of Employability Standards | State of Alaska |
|-----------------------------------|-----------------|

### Tech Prep

|   |    |
|---|----|
| Current Tech Prep Articulation Agreement? (Y/N) | No |
| Date of Current Agreement                       |    |
| Postsecondary Institution Name                  |    |
| Postsecondary Course Name                       |    |
| Postsecondary Course Number                     |    |
| # of Postsecondary Credits                      |    |

DISTRICT NAME: Matanuska Susitna Borough School District

## Additional CTE Course Information

| Author  |  |
|---|--|
| Course developed by   | Ray Jensen, Randy Wolfe, Alan Johnson, Johnathan Halfacre, Gilbert Campbell, Bryan Kirby, Brad Drake |
| Course adapted from   |  |
| Date of previous course revision                                    | February 2006  |
| Course Delivery Model   |  |
| Is the course brokered through another institution or agency? (Y/N) | No   |

| Standards Alignment |
|---------------------|
|---------------------|

| Student Performance Standards<br>(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   |
|---|--|---------------------------------|-----------------------------|---|---------------------------|---|----------------------------------|--|
| Identify and practice construction safety standards.  | NCCER – CORE Basic Safety (00101-09)               | AC 3<br>AC-CST 5, 9             | RST.9-12.3, 4 & 7           | S-MD.6  | A1<br>B2,3,4              | A6  | Health/Safety Work Habits        | NCCER CORE Basic Safety State of Alaska DEED Safety Manual |
| Recognize and explain a variety of math strategies and skills to solve construction problems. | NCCER – CORE Intro to Construction Math (00102-09) | AC 1, 6                         | RST.9-12.3, 4 & 7           | N-Q.1-3<br>AREI.1-4<br>G-CO.1-12<br>G-GMD.1,3&4<br>G-MG.1-3<br>S-ID.9<br>S-IC.6 | B 2,4                     | A2  | Tech Skills Technology           | NCCER CORE Intro to Construction Math                      |
| Describe employability skills.  | SkillsUSA – Technical Standards – Job              | AC1,4,5,7                       | L.9-12.6<br>SL.9-12.1, 4, 6 | S-IC.6<br>S-MD.6&7  | B2,3,4                    | A 1-7<br>B1-5                             | Labor Planning Work Habits       | NCCER CORE Curriculum – Communication &                    |

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|--|---|-------------------------------------|--------------------------------------|---|---------------------------|---|---|---|
|  | Interview<br>NCCER – Basic Employability Skills (00108-09)                              |                                     |                                      |   |                           |   |   | Employment SkillsUSA Job Interview              |
| Recognize and identify effective communication skills.   | SkillsUSA – Technical Standards Speech<br>NCCER – Basic Communication Skills (00107-09) | AC1,5,7<br>AC-CST 5,6<br>AC-DES 2,7 | L.9-12.1, 2, 4, 6<br>SL.9-12.1, 4, 6 | S-IC.6  | B 1,3,4<br>E6             | A1,2,5                                    | Community Work Habits<br>Technology<br>Tech Skills<br>Labor | SkillsUSA Speech<br>NCCER – Basic Communication |
| List and explain technical knowledge of building materials (i.e. wood building materials, fasteners, and adhesives).                                     | NCCER Materials Handling (00109-09)   | AC1,2<br>AC-CST 9<br>AC-DES 8       | L 9-12.6;<br>WHST 9-12.4,8           | N-Q.1<br>S-IC.6<br>S-MD.6&7   | B2,3,4                    | A2,5                                      | Technical Skills  | NCCER Materials Handling                        |
| Identify and explain proper use and maintenance of construction tools and equipment.   | NCCER – Hand Tools and Power Tools (00103-09,00104-09)                                  | AC1,2<br>AC-CST 9<br>AC-DES 8       | RST.9-12.3&4<br>RST.9-10.5           | S-IC.6<br>S-MD.6&7  | B2,4                      | A2,5                                      | Technical Skills  | NCCER – Hand Tools and Power Tools              |
| Identify industry standard practices for various construction processes (i.e. floor systems, wall and ceiling framing, roof framing, and windows/doors). | SkillsUSA – C 1-10  | AC 1,2                              | L.9-12.6<br>WHST.9-12.4&8            | N-Q.1-3<br>AREI.1-4<br>G-CO.1-12<br>G-GMD.1,3&4<br>G-MG.1-3<br>S-ID.9<br>S-IC.6 | B2,4                      | A2,5                                      | Technical Skills  | SkillsUSA                                       |

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|--|--|---------------------------------|--|---------------------------|---------------------------|---|-----------------------------------|--------------------------------|
| Identify and locate building codes and regulations related to the construction trades. |  | AC3<br>AS-DES 4                 | RST 9-10.7;<br>RST 11-12.7; RST 9-12.4 | S-IC.6                    | B2,3,4<br>C2              | A2,5,6                                    | Technical Skills<br>Health/Safety | Class Discussion & Observation |
| Identify and describe construction career opportunities.                               | NCCER – Employability Skills(00108-09) | AC 4,5,7<br>AC-DES2,7           | L.9-12.6<br>WHST.9-12.4&8              | S-MD.6&7                  | B3<br>D6                  | A1-7<br>B1-5                              | Planning<br>Work Habits<br>Labor  | NCCER – Employability Skills   |

**Instructional Resources**

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

Modern Woodworking, Willis Wagner and Clois Kicklighter, The Goodheart-Wilcox Company,  
NCCER Core  
NCCER LEVEL 1 Carpentry