# Articulation Agreement 2015-2016

University Alaska Fairbanks

**Southwest Region School District** 

**Bristol Bay Campus** 

PO Box 90

PO Box 1070

Dillingham, Alaska 99576

Dillingham, Alaska 99576

Purpose:

In addition to the current Tech Prep Agreement between University of Alaska Fairbanks and Southwest Region School District, we have agreed to add the following course that is within UAF Construction Trades Technology Program:

- Southwest Region School District will follow a UAF Construction Trades
   Technology curriculum in coordination with the administration and faculty of the
   University of Alaska Fairbanks pertaining to the following courses on the course
   below.
- 2. Southwest Region School District will teach for the attached outcomes.
- The attached syllabus will follow the learning outcomes of the universityapproved course listed.

UAF Course Number	UAF Course Title	Number of UAF Credits	Southwest Region School District Course Title
CTT 100	Construction Technology CORE	3 credits	IND 506 Building Construction I

- 4. The attached syllabus will be followed.
- Southwest Region School District will provide necessary support for students to be successful in this course which may include computer support, reference books and academic assistance.
- 6. Bristol Bay Campus will process the registrations.
- 7. In order to receive concurrent credit, the student will register for the Tech Prep class during the semester in which the competencies will be completed.

# Approvals:

Michael Hirt

Construction Trades Technology

Academic Head

Interior Alaska Campus

University of Alaska Fairbanks

Signature

Date

Debi McLean-Nelson

Director

University of Alaska Fairbanks

Deborah M Ken

Bristol Bay Campus

Dillingham, Alaska

Signature

Data

David Piazza

Superintendent

Southwest Region School District

Dillingham, Alaska

Signature

Date

Peter Pinney

Executive Dean

College of Rural and Community

Development

P.O. Box 6500

University of Alaska Fairbanks

Fairbanks, AK 99775-6500

Susan Henrichs,

Provost

P.O. Box 7580

University of Alaska Fairbanks

Fairbanks, AK 99775-7580

Signature

Date

Signature

Date

# CONSTRUCTION TECHNOLOGY CORE COURSE OUTLINE

Course Title:

Construction Technology Core

Course No:

**CTT 100** 

NCCER Module/s No.:

00101, 00103-00105

Credits:

3

None

Prerequisites: Instructor:

Greg Cejka

Location:

Togiak, AK

Dates:

01/11/2016 - 05/20/2016

Times:

Monday-Friday 50 minutes a day

Office:

Office hours: available on first day of class

# **COURSE DESCRIPTION:**

This course introduces basic construction techniques using OSHA approved standards by stressing how to follow safe work practices and procedures, how to safely use hand and power tools, and how to extract information from construction drawings.

This course is divided into four (4) modules. Each module must be successfully passed. Generally, each module will have two (2) components. All will have a written portion including a final exam. Most modules will require hands-on demonstration of achieved competencies related to the module.

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### **Basic Construction Safety**

NCCER Module No.: 00101 -Basic Safety

# **Module Description:**

This module introduces basic construction safety using OSHA approved standards by stressing how to follow safe work practices and procedures, proper inspection of safety equipment before use, and the proper use of safety equipment.

## **Learning Objectives:**

Upon successful completion of the module, the participant will be able to:

- Identify the responsibilities and personal characteristics of a professional craftsperson.
- 2. Explain the role that safety plays in the construction crafts.
- 3. Demonstrate the use and care of appropriate personal protective equipment.
- 4. Describe and demonstrate safe behavior on and around ladders and scaffolds.
- 5. Describe fire prevention and fire-fighting techniques around a construction site.
- 6. Explain the importance of the HazCom (Hazard Communication Standard) requirements and MSDSs (Material Safety Data Sheets)
- 7. Define safe work procedures around electrical hazards.

# Performance Objectives:

Under the supervision of the instructor, the trainee should be able to:

- 1. Inspect personal protective equipment (PPE) to determine if it is safe to use
- 2. Properly don and remove personal protective equipment

# **Module Content:**

- 1. The Craft Professional
- Causes of Accidents on the Construction Site.
- 3. Company Safety Policies and OSHA Regulations.
- Construction Site Job Hazards.
- 5. Working Safely with Job Hazards.
- 6. Personal Protective Equipment.
- 7. Aerial Work.
- 8. Hazard Communication Standards.
- 9. Fire Safety.
- 10. Electrical Safety.

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# Introduction to Hand and Power Tools

NCCER Modules No.:

00103-Introduction to Hand Tools

00104-Introduction to Power Tools

## **Module Description:**

These modules introduce basic hand and power tools used in construction and maintenance and stress the importance of their care and use. They provide valuable safety information for each type of tool discussed. Understanding proper usage helps trainees to prevent accidents. They, also, introduce some specialty tools used by different crafts.

#### Learning Objectives:

Upon completion of the modules, the participant will be able to:

- 1. Recognize and identify some of the basic hand tools used on the construction site.
- 2. Use these tools safely.
- 3. Describe and demonstrate the proper procedures for taking care of these tools.
- 4. Identify commonly used power tools of the construction and carpentry trade.
- 5. Demonstrate correct and safe use of the power tools.
- 6. Demonstrate proper maintenance of power tools.

### **Performance Objectives:**

Under the supervision of the instructor, the trainee should be able to:

- 1. Visually inspect commonly used hand tools to determine if they are safe to use
- 2. Safely and properly use commonly used hand tools
- 3. Safely and properly operate an electric drill
- 4. Safely and properly operate a circular saw
- 5. Safely and properly operate a bench grinder
- 6. Safely and properly a portable belt sander
- 7. Safely and properly operate a pneumatically powered nailer (nail gun)

## **Module Content:**

- 1. Hammers.
- 2. Screwdrivers.
- 3. Sledgehammers.
- 4. Ripping Bars and Nail Pullers.
- 5. Wrenches.
- 6. Pliers and Wire Cutters.
- 7. Levels, Squares, and Measuring Devices.
- 8. Vises and Clamps.
- 9. Files, Rasps, Chisels, and Punches.
- 10. Chain Falls, Come-Along, Hoisting Devices.
- 11. Power Drills, Hand and Power Saws.
- 12. Grinders, Sanders, and Air Nailers.
- 13. Miscellaneous Power Tools.

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# Introduction to Blueprint Reading

NCCER Module No.:

00105-Introduction to Blueprint Reading

## **Module Description:**

This module introduces basic blueprint terms, components, and symbols. It presents different types of construction drawings commonly used on job sites and describes why each type of drawing is important. This module covers standardized information contained on blueprints such as identification, revision status, symbols, project titles, dimension, and scale.

# **Learning Objectives:**

Upon completion of the module, the participant will be able to:

- 1. Recognize and identify basic blueprint terms, components, and symbols.
- 2. Relate information on blueprints to actual locations on the print.
- 3. Recognize different classifications of drawings.
- 4. Interpret and use drawing dimensions.

### **Performance Objectives:**

Under the supervision of the instructor, the trainee should be able to:

1. Extract requested information from a set of construction drawings

#### **Module Content:**

- 1. Introduction to Blueprints.
- 2. Components of the Blueprint.
- Scale Drawings.
- 4. Lines of Construction.
- 5. Abbreviations, Symbols, and Keynotes.
- 6. Using Gridlines to Identify Locations.
- 7. Levels, Squares, and Measuring Devices.
- 8. Dimensions.

# 9. Layout of Common Structure

# Method of Grading for Complete Course:

Pass/fail	Letter Grade	X	other	(explain)
Grade will be	based on the follow	wing:		
Attendance			20%	
Lab/Participation			30%	
Examination			40%	
Skill Mastery			10%	

# **Course Grading Requirements:**

A letter grade will be issued for participants who successfully complete the course. Written tests will be given at the end of each section to test the knowledge of the participant.

Letter grade criteria: 91 to 100% = A letter grade 81 to 90% = B letter grade 71 to 80% = C letter grade 60 to 70% = D letter grade Less than 59% = F letter grade

# **UAF Disabilities Services for Distance Students**

UAF has a Disability Services office that operates in conjunction with the College of Rural Alaska's (CRA) campuses and UAF's Center for Distance Education (CDE). Disability Services, a part of UAF's Center for Health and Counseling, provides academic accommodations to enrolled students who are identified as being eligible for these services.

If you believe you are eligible, please visit <a href="http://www.uaf.edu/chc/disability.html">http://www.uaf.edu/chc/disability.html</a> on the web or contact a student affairs staff person at your nearest local campus. You can also contact Disability Services on the Fairbanks Campus at (907) 474-7043, <a href="fydso@uaf.edu">fydso@uaf.edu</a>.

### **Facilities Required:**

Classroom capable of seating 15 participants with comfortable chairs and work tables/desks, overhead projector/LCD projector, wipe boards, TV Monitor and VCR, marking pencils, and standard instructional equipment.

## Lab Supplies Required:

Lab equipment will consist of various PPE, drawings, hand and power tools, and miscellaneous building materials and fasteners.

## Textbook & Materials

NCCERICorelCurriculum Published by Prentice Hall or equivalent Course handout related to topics covered