Department/School: ***Career Education***
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Program Name: ***AAS Construction Technology***
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MISSION STATEMENT
Construction Technology at UAS is dedicated to providing quality learning opportunities in a supportive environment where construction students can learn new skills or improve existing skill levels. Construction Technology provides the knowledge, tools and experiences that enable students to attain employment, develop professionally, and experience personal growth and enrichment.

1. Student Learning Goals
Introduction:
Construction Technology will provide the education and training to meet the needs of the residential construction industry within the cold maritime climate of Southeast Alaska. AAS graduates will have a comprehensive basic understanding of Construction Technology. Graduates will realize these goals by meeting the competency requirements embedded in each specific program and GER course. Program competencies will be defined, in collaboration with our program industry advisory board, by the Construction Technology Mission Statement.

The UAS 2010-2017 strategic plan will provide an institutional framework for the program.

Goal 1:

Construction Technology AAS graduates will attain employment in the residential construction or related fields, and/or will continue in education in construction or related fields.

Goal 2:

Students will be able to demonstrate with proficiency, the set learning outcomes for each Construction Technology Course.

2. Exit Outcomes
For each goal exit outcomes will be established within the following basic areas. Graduates will be expected to demonstrate competencies in each area:

Goal One Outcomes*:*
1.1 Graduates will be knowledgeable about basic job safety; general construction site safety, personal protection equipment, good housekeeping, scaffolds and ladders, lifting and carrying, fire protection, first aid, electrical and chemical safety.

1.2 Graduates will demonstrate the ability to apply construction related techniques, skills, and tools use to varying construction projects.

1.3 Graduates will demonstrate an understanding of basic drafting and design skills. Designs will express an understanding of buildings as a system which includes, foundations, framing, building enclosures, mechanical, electrical, HVAC, and plumbing systems.

1.4 Graduates will have the skills to safely perform residential construction tasks in the categories of foundations layout, exterior and interior rough framing, finish carpentry, basic plumbing and electrical.

1.5 Graduates will understand basic construction management including; planning, scheduling, estimating, and accounting as they apply in small business practices.

Goal Two Outcomes:

Upon satisfactory completion of a specified course a student will be able to proficiently demonstrate the agreed upon Student learning outcomes as outlined in the 2015 Curriculum SLO update**.**

2.1 Example- SLO's from Construction Technology 120 Basic Construction Techniques

Students will be able to:

- Apply and Demonstrate safe practices with power tools
- Identify and Select correct Hand tools for specific tasks
- Identify reference and select varying types of man-made wood products to include OSB, CDX, LSL, PSL, and LVL.
- Categorize and differentiate fastener category type and use
- Comprehend the different characteristics of Concrete
- Construct concrete forms that are level, square and match blueprint requirements
- Identify and place rebar reinforcement coinciding with code and plan requirements
- Volumetrically calculate concrete delivery needs
- Sight identify framing methods, platform, post & beam, and balloon.
- Analyze square and level of a foundation
- Install sills, beams, girders, headers, joists, bridging, blocking and floor sheathing.
- Identify load bearing walls from partition walls
- Layout walls on floor decks
- Calculate length and size of headers
- Correctly plumb and brace walls sections
- Cut layout and install ceiling joists and rafters
- Identify types of trusses and typical applications and methods of installation
- Cut layout and install hips, valleys, and overhangs

Upon completion of this course students will be able to demonstrate these to a degree of competency. In addition to these Student Learning Outcomes students will be able demonstrate the following.

2.2 Completers will be able to effectively apply basic analytical skills and mathematical reasoning in solving construction technology problems. Where applicable, computer technology will be used to assist in solving problems and formatting answers.

2.3 Completers will be able to draw on a variety of information sources to assist them in

communicating, analyzing and solving construction technology problems.

2.4 Completers will learn the fundamentals of professional behavior, responsibility, good work habits, and ethical decision making.

2.5 Completers will be able to utilize a critical thinking approach to solving construction problems.

Program Assessment:
Annually, satisfaction questionnaires will be sent to all completers of AAS degrees, Certificates, and Occupational Endorsements to provide the department and faculty feedback on program content and value to students.

Surveys will be sent to employers identified from the student surveys to assess the quality of our graduate's performance.
Phone call inquiry of local employers that have been known to hire our students will be performed.

Significant Program Changes (2014-2015)
The Construction Technology Dept. has partnered with the Juneau School District and the Juneau Housing trust to build an Affordable house. This partnership enables the hiring of a Fulltime faculty member that will project manage the home as well as teach 15 credits for UAS over the AY. The project had a Dec 2014 begin date with an estimated completion date of Dec 2015.

The Faculty of the Construction Dept. received national NCCER training and certification to teach CORE classes. Three CORE classes were taught for the Juneau Construction Academy with 54 Participants.

A "tiny House" Was built this year in the lab as a collaborative effort to display the knowledge and abilities of our students - The project was student designed and built in a collaborative effort of all the CT classes over the AY. This effort produced a 120 SQ ft high insulated "Tiny House" to be sold with proceeds being reinvested in the Construction Technology Program.