Articulation Agreement
2019-2020

University Alaska Fairbanks  
Interior Alaska Campus  
810 Draanjik  
Fairbanks, Alaska 99709

Yukon Flats School District  
Po Box 350  
Ft. Yukon, Alaska 99740

Purpose:
In addition to the current Tech Prep Agreement between University of Alaska Fairbanks and Yukon Flats School District, we have agreed to add the following course that is within CRCD Construction Trades Technology programs.

1. Yukon Flats 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. Yukon Flats School District will teach for the attached outcomes.
3. The attached syllabus will follow the learning outcomes of the university-approved course listed.

<table>
<thead>
<tr>
<th>UAF Course Number</th>
<th>UAF Course Title</th>
<th>Number of UAF Credits</th>
<th>Yukon Flats School District Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTT 137</td>
<td>Appliance Troubleshooting and Repair</td>
<td>1 Credit</td>
<td>Appliance Troubleshooting and Repair</td>
</tr>
</tbody>
</table>

1. The attached syllabus will be followed.
2. Yukon Flats School District will provide necessary support for students to be successful in this course which may include computer support, reference books and academic assistance.
3. Interior Alaska Campus will process the registrations.
4. 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:

Mike Hirt
Construction Trades Technology
Program Head
Interior Alaska Campus
University of Alaska Fairbanks

Bryan Uher
Director
University of Alaska Fairbanks
Interior Alaska Campus
Fairbanks, Alaska

Gerald Andrew
Voc Ed Center
Yukon Flats School District
Ft. Yukon, Alaska

Signature Date

March 25, 2019

Signature Date

March 25, 2019

Signature Date

May 2, 2019
**COURSE SYLLABUS**

**Course Title:** Appliance Troubleshooting and Repair  
**Course No:** CTT 137  
**Credits:** 2 (1+1.5)  
**Instructor:** TBA  
**Office Hours:** Instructor will post office hours for students at first class  
**Location:** TBA  
**Dates:** TBA  
**Time:** TBA  
**Texts:** Hand outs provided by instructor

**Course Description:**

This course will provide students with conceptual and practical applications in troubleshooting and repairing appliances. Students will be instructed in diagnostic skills that support repairing and replacing components in various equipment such as toyostove, refrigerators, washing machines, dishwashers, clothes dryer, and oven/cook-tops. Class activities will support critical thinking and problems solving in measuring electrical current using voltmeters, analyzing mal-functions, and other difficulties associated with common appliances.

**Course Goals:**

Students will acquire knowledge and practical experience in troubleshooting and repairing equipment. Instruction will include proper care, maintenance, and safety of these applications. Students’ understanding and familiarity with these occupations will support village construction.

**Instructional Methods:**

Instructional method will be a combination of face-to-face instruction/lecture, small group discussions, and practical application in the field. Classroom environment may consist of work tables/desks; overhead projector/LCD projector; wipe boards; TV/VCR; and standard instructional equipment dealing with power tools, drawings, and blueprints.

**Supplies:**

Supplies will consist of various appliances that do not work properly which will allow the participant to diagnosis the problems.
**Student Outcomes:**

Upon completion of the course students should be able to:

<table>
<thead>
<tr>
<th>Students should be able to:</th>
<th>Evaluated by:</th>
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</thead>
<tbody>
<tr>
<td>1. Demonstrate knowledge and functional safety/ethical practices related to the troubleshooting and repairing kitchen appliances.</td>
<td>Relevant activities, small class projects, and reading</td>
</tr>
<tr>
<td>2. Identify, analyze, and make adjustments to correctly repair and/or replace internal of kitchen components.</td>
<td>Readings, class discussions, and relevant group activities</td>
</tr>
<tr>
<td>3. Demonstrate correct methods of troubleshooting malfunctions, and non-functioning appliances.</td>
<td>Readings, small class projects</td>
</tr>
<tr>
<td>4. Demonstrate proper knowledge of replacing or/and installing new appliance components.</td>
<td>Relevant activities and small class projects</td>
</tr>
<tr>
<td>5. Demonstrate ability to problem solve and apply critical thinking skills to problems.</td>
<td>Relevant class projects and class discussions</td>
</tr>
</tbody>
</table>

**Course Evaluation:**

A letter grade will be issued for participants who successfully complete the course.

<table>
<thead>
<tr>
<th>% of Total</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>91 to 100%</td>
<td>A letter grade</td>
</tr>
<tr>
<td>81 to 90%</td>
<td>B letter grade</td>
</tr>
<tr>
<td>71 to 80%</td>
<td>C letter grade</td>
</tr>
<tr>
<td>60 to 70%</td>
<td>D letter grade</td>
</tr>
<tr>
<td>59% and below</td>
<td>F letter grade</td>
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</tbody>
</table>

Total points for the course will be assigned and weighted based on the following:

- Attendance/Participation……………………………………15%
- Student Activity Practice……………………………………15%
- Return Demonstration for Skill Mastery………………….20%
- Individual Examination ….. 50% (total)

*Attendance/Participation (15%)* means the student is in class, has read the required material, and is active participating in the classroom session.

*Student Activity/Practice (15%)* means a group of students will practice the safe use of handling various electrical volt meters, meggers, and multimeters. They will rehearse replacing non-functioning components and worn mechanical devices.
Return Demonstration (20%) means under the observation of the instructor, the students will demonstrate safe use of various electrical volt meters, meggers, multimeters, that measure electrical current in various appliances. Students will demonstrate replacement of non-functioning components, replace worn mechanical devices, and return the appliance to operating condition.

Exam (50%) is the evaluation tool the instructor will use to determine final mastery of a skill.

Course Calendar:

<table>
<thead>
<tr>
<th>Day of Activity</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Introduction of students, instructor, syllabus, community needs, evaluation process, reading material, and proper handling/safety of special tools and equipment.</td>
</tr>
<tr>
<td>Day 2</td>
<td>Common household appliances and troubleshooting methods.</td>
</tr>
<tr>
<td>Day 3</td>
<td>Introduction to vented heater appliances, concept of operation, and annual maintenance methods</td>
</tr>
<tr>
<td>Day 4</td>
<td>Proper installation, wiring and fuel-to-appliance methods, fire safety and electrical safety considerations during installation.</td>
</tr>
<tr>
<td>Day 5</td>
<td>Proper appliance maintenance, cleaning techniques and troubleshooting digital equipment.</td>
</tr>
<tr>
<td>Day 6</td>
<td>Final review of major topics, testing and make up any late work.</td>
</tr>
</tbody>
</table>

Course Policies:

Students are expected to arrive ready to actively participate in discussion of troubleshooting and repairing applications and activities. Attendance is a critical component of this course and students must be on time and prepared for the course material.

Support Services:

The instructor is available upon appointment for additional assistance outside normal session/class hours.

UAF Disabilities Services for Distance Students:

UAF has a Disability Services office that operates in conjunction with the College of Rural and Community Development (CRCD) campuses. 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 [http://www.uaf.edu/chc/disability.html](http://www.uaf.edu/chc/disability.html) 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, fydso@uaf.edu.
Every qualified student is welcome in my classroom. As needed, I am happy to work with you, disability services, veterans' services, rural student services, etc to find reasonable accommodations. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. As required, if I notice or am informed of certain types of misconduct, then I am required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you to resolve problems, please go the following site:

www.uaf.edu/handbook/