TRIAL COURSE OR NEW COURSE PROPOSAL

<table>
<thead>
<tr>
<th>SUBMITTED BY:</th>
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<tbody>
<tr>
<td>Department</td>
<td>Diesel Technology</td>
</tr>
<tr>
<td>Prepared by</td>
<td>Julie Wegner</td>
</tr>
<tr>
<td>Email Contact</td>
<td><a href="mailto:jmwegner@alaska.edu">jmwegner@alaska.edu</a></td>
</tr>
<tr>
<td>College/School</td>
<td>UAF/CTC</td>
</tr>
<tr>
<td>Phone</td>
<td>455-2902</td>
</tr>
<tr>
<td>Faculty Contact</td>
<td>Brian Rencher 455-2843</td>
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1. ACTION DESIRED

<table>
<thead>
<tr>
<th>Trial Course</th>
<th>New Course</th>
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2. COURSE IDENTIFICATION:

<table>
<thead>
<tr>
<th>Dept</th>
<th>DSLT</th>
<th>Course #</th>
<th>F110</th>
<th>No. of Credits</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>DSLT</td>
<td>F110</td>
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<td>2.0</td>
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3. PROPOSED COURSE TITLE:

Basic Industrial Fabrication

4. To be CROSS LISTED?

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>If yes, Dept:</th>
<th>Course #</th>
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<tr>
<td>NO</td>
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(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. To be STACKED?

<table>
<thead>
<tr>
<th>YES/NO</th>
<th>If yes, Dept.</th>
<th>Course #</th>
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<tr>
<td>NO</td>
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6. FREQUENCY OF OFFERING:

Fall Semester every year

7. SEMESTER & YEAR OF FIRST OFFERING

<table>
<thead>
<tr>
<th>AY2013-14</th>
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8. COURSE FORMAT:

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

<table>
<thead>
<tr>
<th>COURSE FORMAT: (check all that apply)</th>
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<tr>
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<tr>
<th>OTHER FORMAT (specify)</th>
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<tbody>
<tr>
<td>5 hours a day for 10 days (1 + 2)</td>
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<table>
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<tr>
<th>Mode of delivery (specify lecture, field trips, labs, etc)</th>
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<tbody>
<tr>
<td>Lecture and Lab</td>
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9. CONTACT HOURS PER WEEK:

<table>
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<tr>
<th>1 LECTURE hours/weeks</th>
<th>2 LAB hours/week</th>
<th>PRACTICUM hours/week</th>
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Note: # of credits are based on contact hours. 800 minutes of lecture = 1 credit. 2400 minutes of lab in a science course = 1 credit. 1600 minutes in non-science lab = 1 credit. 2400-4800 minutes of practicum = 1 credit. 2400-8000 minutes of internship = 1 credit. This must match with the syllabus. See http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/guidelines-for-computing/ for more information on number of credits.

OTHER HOURS (specify type)
10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

DSLT F110  Basic Industrial Fabrication
2.0 Credits - Offered Fall Semester

Students will learn the concepts of industrial fabrication. When working with heavy equipment, things break. This class will teach the basics of how to fabricate and repair heavy equipment in and out of the field using various techniques. Special fees apply. (1+2)

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

| H - Humanities | S - Social Sciences |

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form. | YES: | NO: | X |

IF YES, check which core requirements it could be used to fulfill:

- O = Oral Intensive, Format 6
- W = Writing Intensive, Format 7
- Natural Science, Format 8

12. COURSE REPEATABILITY:

Is this course repeatable for credit? | YES | NO | X |

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit? | TIMES |

If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course? | CREDITS |

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course? | CREDITS |

13. GRADING SYSTEM:  Specify only one. Note: Later changing the grading system for a course constitutes a Major Course Change.

LETTER: | X | PASS/FAIL: |

14. PREREQUISITES

None

These will be required before the student is allowed to enroll in the course.

15. SPECIAL RESTRICTIONS, CONDITIONS

Departmental/Instructor Approval

16. PROPOSED COURSE FEES

$150.00

Has a memo been submitted through your dean to the Provost for fee approval? Yes/No

Yes/No  For consumable materials

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously? Yes/No

If yes, give semester, year, course #, etc.:
18. **ESTIMATED IMPACT**

**WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.**

None

19. **LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

<table>
<thead>
<tr>
<th>No</th>
<th>X</th>
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**Book selected: Welding Principles and Applications**

20. **IMPACTS ON PROGRAMS/DEPTS**

What programs/departments will be affected by this proposed action?

Include information on the Programs/Departments contacted (e.g., email, memo)

This class will affect the welding program and diesel technology program. The request is from Brian Rencher, Coordinator for both programs.

bkrencher@alaska.edu

21. **POSITIVE AND NEGATIVE IMPACTS**

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

This course will increase diesel/heavy duty equipment credit courses, which will allow students to learn specific techniques for working on heavy duty equipment. It will allow more students to enroll in the welding program.

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

Enrollment in Basic Industrial Fabrication will teach students skills to repair heavy duty equipment for long term use. Welding techniques will be used that are specific to heavy equipment. Students will learn how to fabricate and make repairs in and out of the field. Learn to use portable equipment, select the proper materials and make repairs in the field will benefit students in the job market. Heavy duty equipment does not break in the shop. Field repairs are a necessity in the industry. This course will further their knowledge to overall maintenance of heavy duty equipment.

**APPROVALS:** Add additional signature lines as needed. AS PER ATTACHED.

<table>
<thead>
<tr>
<th>Signature, Chair, Program/Department of: Diesel Technology</th>
<th>Date</th>
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<tr>
<th>Signature, Chair, College/School Curriculum Council for:</th>
<th>Date</th>
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<tr>
<th>Signature, Dean, College/School of:</th>
<th>Date</th>
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<table>
<thead>
<tr>
<th>Signature of Provost (if applicable)</th>
<th>Date</th>
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</table>

Offerings above the level of approved programs must be approved in advance by the Provost.
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APPROVALS: Add additional signature lines as needed.

Signature, Chair, Program/Department of: [Signature] Diesel Technology Date 10-9-12

Signature, Chair, College/School Curriculum Council: [Signature] CTC Date 11-6-12

Signature, Dean, College/School of: [Signature] CTC Date 12-3-12

Signature of Provost (if applicable)
Offerings above the level of approved programs must be approved in advance by the Provost.
ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair
Faculty Senate Review Committee: ___Curriculum Review ___GAAC
___ Core Review ___SADAC

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

Signature, Chair,
Program/Department of: 

Signature, Chair, College/School Curriculum Council for:

Signature, Dean, College/School of: CACD

Date 12/3/12
ATTACH COMPLETE SYLLABUS (as part of this application). Note: The guidelines are online: http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/uaf-syllabus-requirements/

The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. Course information:
   - Title, number, credits, prerequisites, location, meeting time (make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:
   - Name, office location, office hours, telephone, email address.

3. Course readings/materials:
   - Course textbook title, author, edition/publisher.
   - Supplementary readings (indicate whether required or recommended) and any supplies required.

4. Course description:
   - Content of the course and how it fits into the broader curriculum;
   - Expected proficiencies required to undertake the course, if applicable.
   - Inclusion of catalog description is strongly recommended, and the description in syllabus must be consistent with catalog course description.

5. Course Goals (general), and (see #6)

6. Student Learning Outcomes (more specific)

7. Instructional methods:
   - Describe the teaching techniques (e.g., lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:
   - A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g., it is not adequate to say “lab”. Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

9. Course policies:
   - Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:
    - Specify how students will be evaluated, what factors will be included, their relative value, and how they will be tabulated into grades (on a curve, absolute scores, etc.). Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but may be a convenient way to publicize this.) Faculty Senate Meeting #171: http://www.uaf.edu/uafgov/faculty-senate/meetings/2010-2011-meetings/#171

11. Support Services:
    - Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services:
    - The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

6/30/2011
Instructor: Brian Rencher

Hours: Monday – Friday

Class Dates: Theory 3:00pm – 5:00pm
Room: 147 Hutch
Office Hours: 2:00pm – 9:00pm
Office Phone: 907-455-2843
Cell Phone: 907-460-6332
E-mail: bkrencher@alaska.edu

Supplies required:
- Reading material: Welding Principles and Applications
- Misc hand tools: Per handout
- Protective clothing: Coveralls with sleeves
- Protective footwear: Above ankle boots
- Eye protection: Safety glasses
- Misc materials: Paper pad and pen (for instructions)

Course goals:
Students will learn the concepts of industrial fabrication. When working with heavy equipment, things break. This class will teach the basics of how to fabricate and repair heavy equipment in and out of the field using various techniques.

Course objectives:
Upon completion of this course, the student should have the following:

1. Basics of fabrication
2. Ability to identify and choose the right materials
3. Understand the weak/stress points
4. Knowledge of emergency repairs that can be performed in the field
5. Basic welding techniques used on heavy equipment

Course policies:
- Cell phones are not permitted during class hours (theory or shop/lab).
- A fifteen minute break will be given between theory and shop/lab at 5:00pm. This thirty minute break for lunch is the only allowable breaks without instructor’s permission.
- No smoking inside the building or on school property at any time (per CTC/Hutchison Policy)
- All students are governed by the UAF Student Code of Conduct as it is applicable.
- Safety glasses are to be worn at all times in the shop area.
- Textbook, paper pads and pen are to be brought to class every day.
- During a fire alarm, students will gather in the CTC parking area with others from the class and will stay there until authorized by the instructor.
- Students are required to use a time clock when starting the day, going to lunch, returning from lunch and ending the day. Students are also required to keep a daily log of shop/lab projects. This will be discussed on a weekly basis between student and instructor as well as the previous week’s grading point.
• Each student is responsible for documenting requirements on procedures in the shop/lab. (Example: When given instruction on a project, it is the student’s responsibility to write down the given tasks.)
• All CTC shop tools are to be signed out by the daily assigned Forman of the shop and are to be returned at the end of each day to the instructor/Forman.
• Students are required to be working the entire time while in shop/lab. If your task is complete, you are expected to clean the shop, study text book or service manual, or ask the instructor for a task to fill in time.
• Each student is responsible for cleaning their own work area on a daily basis and keeping it clean and orderly throughout the day. No students are to remove coveralls or leave for the day until the entire shop is clean and authorized by the instructor/Forman.
• When lifting any item over an estimated 40 lbs, ask instructor for approval.
• When using the overhead hoist, cranes, roll around picking hoist or forklift for lifting, you MUST get instructors approval of the rigging before lifting.
• Any student that is injured during class is required to inform the instructor immediately, no matter how minor the injury.
• No earphones or personal music devices are allowed during class theory or shop/lab.
• Students that do not follow the above outlined regulations can be withdrawn from the diesel program by the instructor.

The following is the grading scale for this class:

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<tbody>
<tr>
<td>Attendance</td>
<td>25%</td>
</tr>
<tr>
<td>Instructor Evaluation/Hands on Performance</td>
<td>25%</td>
</tr>
<tr>
<td>Exams</td>
<td>50%</td>
</tr>
</tbody>
</table>

GRADE POINTS

A > 90%  B = 85% - 89%  C = 80% - 84%  D = 70% - 79%  F < 69%

Grading policies:
• 80% Attendance is required.
• 25% of your grade will be based on attendance, participation and completed engine performance based on the instructor’s evaluation.
• 25% of your grade per week is determined by a once-a-week exam quiz, either written or verbal.
• Grading safety is an important part of this course and this industry, therefore any safety violations will result in a loss of 50% of daily points.
• A student, who is unable to attend class, should call and inform the instructor before class starts or make previous arrangements. This will allow students two points for the missed day. Otherwise zero points will be given for the missed day. Students can call office at 455-2843 if the instructor is not able to be reached.
• If a student is absent, it is their responsibility to get the information that was covered during their absence. The student is expected to take the weekly test/exam at the same time as all the other students in the class regardless of absenteeism.
• Exams/quizzes will be given once a week. Any make-ups will be dealt with on an individual basis.
• Tardiness is defined as up to one hour from class start time and will result in a loss of two points for the day.

This system cannot be altered after the first class meeting.

NOTICE TO STUDENTS

Support Services
The following services are available to all students: The Writing Center (8th floor, Gruening, 474-5314) and the Math Lab (305 Chapman), both of which provide excellent advice, tutoring and assistance; and/or Office of Student Support Services (508 Gruening, 474-6844). Also available is the Student Assistance Center at CTC which offers many services such as: academic advising, placement testing, career assessment, career counseling, computer support, math labs, tutors/tutoring, and a writing center. The center is located at 604 Barnette St. and is open M-F from 8am-5pm. For more info contact the center at 455-2899.

Disabilities Services
The office of Disability Services, 204 WHIT, 474-7043, implements the Americans with Disabilities Act (ADA), and insures that UAF Students have Equal Access to the campus and course materials. The CTC Office of Student Assistance can also help you if you have any of these concerns. Contact them at 455-2899 if you need help.

UAF Disability Services for Distance Students
UAF has a Disability Services office that operates in conjunction with the Community and Technical College. 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.

Any student who feels discouraged or disappointed with instruction, curriculum or other, please notify the Diesel Coordinator, Brian Rencher at 907-455-2843 or the Student Assistant Coordinator, Michelle Stalder at 907-455-2849.

EMERGENCY PROCEDURES
1. Evacuation procedures – see instructions posted in the classroom.
2. First aid kit – located in Equipment Shop 147.
3. Emergency ambulance – from any available telephone, phone “9” to get an outside line, then “911.” Campus Police – phone 474-7721 In an “Emergency” dial “911”

COURSE OUTLINE:

Day 1: Safety in fabrication and working with heated materials
   Review chapter 2 – safety in welding
   Review questions at the end of chapter 2, as a class discussion
   Review chapter 24 – workability of metals
   Theory: metals used in the trucking and heavy equipment industry

Day 2: Review: A: Safety       B: Metal types and compositions
       Theory: heating and handling of heated metals
       Chapter 7 – discussion and review and chapter questions as a class discussion
       Lab: Demonstration of oxygen/acetylene torch – disassemble – breakdown – clean

       - reassemble – inspect for leaks

Day 3: Review chapter 7
       Theory: handing and storing of compressed gauges
       Video on air liquid
       Theory: adjusting pressures on oxy/acetylene torch
       Lab: Student practice disassemble – reassemble – testing and adjusting of torch

Day 4: Review compressed gas information and pressure regulator adjustments
Theory: torch tip types, sizes, cleaning and inspecting
  Lighting and adjusting the torch
  Heating metal and checking temperature and discolorations
Lab: Torch setup, adjusting, lighting, and heating of metals

Day 5: Review heating of metals
  Theory: heat control and using the torch for cutting metals
  Lab: Practice heating metals; cutting metals
  **Test:** a: safety  b: compressed gases  c: handling of metals  d: torch  e: heating and cutting
Day 6: Theory: Review previous week
   Lab: Practice heating and cutting different types and thicknesses of metal

Day 7: Theory: chapter 8 – plasma cutting
   Video
   Lab: Demonstration by instructor on set-up and use of a plasma cutting tool

Day 8: Theory: Review chapter 8
   Questions and at end for a classroom discussion
   Lab: students practice using the plasma torch

Day 9: Theory: review us of plasma torch
   Review metal types and their characteristics
   Instruction on banding techniques
   Video
   Lab: students practice heating, cutting and bending metals in 45° and 90°

Day 10: Theory: making and using channel, angle, brackets, and gussets on metal repairs
   on trucks and heavy equipment
   Glazing – field and shop repair methods
   Test: written and hands-on
I _______________________ have received a copy of the DSLT F110 “Basic Industrial Fabrication” class syllabus and have read and understand the class rules and testing procedures.

________________________________
Date

________________________________
Instructor's signature

________________________________
Date

________________________________
Student's signature