

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).
 See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	Diesel Technology	College/School	UAF/CTC
Prepared by	Julie Wegner	Phone	455-2902
Email Contact	jmwegner@alaska.edu	Faculty Contact	455-2917 Brian Rencher x2843, bkrencher@alaska.edu

1. **ACTION DESIRED**
 (CHECK ONE): Trial Course New Course XXX

2. **COURSE IDENTIFICATION:**

Dept	DSL T	Course #	F110	No. of Credits	2.0
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Justify upper/lower division status & number of credits:

3. **PROPOSED COURSE TITLE:** Basic Industrial Fabrication

4. **To be CROSS LISTED?** YES/NO NO If yes, Dept: Course #
 (Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. **To be STACKED?** YES/NO NO If yes, Dept: Course #

6. **FREQUENCY OF OFFERING:**
 Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) - or As Demand Warrants

7. **SEMESTER & YEAR OF FIRST OFFERING** (AY2011-12 if approved by 3/1/2012; otherwise AY2012-13) FY2013-14

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.

COURSE FORMAT: (check all that apply) 1 2 3 4 5 6 weeks to full semester
 OTHER FORMAT 5 hours a day for 10 days

(specify) _____
 Mode of delivery Lecture and Lab
 (specify lecture, field trips, labs, etc) _____

9. **CONTACT HOURS PER WEEK:** 20 LECTURE hours/weeks 30 LAB hours /week PRACTICUM hours /week

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):

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.

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:

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

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: PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. **PREREQUISITES**

None

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

15. **SPECIAL RESTRICTIONS, CONDITIONS**

Departmental Approval

16. **PROPOSED COURSE FEES**

\$150.00

Has a memo been submitted through your dean to the Provost for fee approval?

Yes

Yes/No For consumable materials

17. **PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?

NO

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.

No

Yes

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

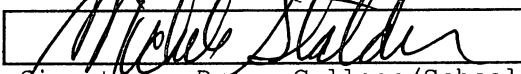
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory.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

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

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

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

 Date

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

	Date	
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Signature, Chair

Faculty Senate Review Committee: ___Curriculum Review ___GAAC

___Core Review ___SADAC

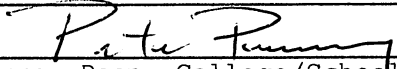
ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

	Date	
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Signature, Chair,
Program/Department of:

	Date	
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Signature, Chair, College/School Curriculum
Council for:

	Date	12/3/12
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Signature, Dean, College/School
of:

CRED

DSLTF110 – BASIC INDUSTRIAL FABRICATION

Instructor:	Brian Rencher	Hours:	Monday – Friday
Class Dates:		Theory	3:00pm – 5:00pm
Room:	147 Hutch	Dinner	5:00pm – 5:30pm
Office Hours:	2:00pm – 9:00pm	Shop/Lab	5:30pm – 8:30pm
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:

Attendance	25%
Instructor Evaluation/Hands on Performance	25%
Exams	50%
GRADE POINTS	
A > 90%	B = 85% - 89%
C = 80% - 84%	D = 70% - 79%
F < 69%	

Grading policies:

- 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. In determining the final grade, I will evaluate the student's performance in the following areas...

50% Attendance, Participation and compilation performance
 50% Exams performed on a weekly basis (both theory and lab)
 80% Attendance required.

All grades will appear on your transcript. The Office of Admissions and Records maintains transcripts.

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

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Day 3: Review chapter 7

Theory: handling 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°
- Day10: 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
DSLTT 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