Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).

See <u>http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/</u> for a complete description of the rules governing curriculum & course changes.

	TRIAL COURSE OR NEW COURSE PROPOSAL											
SUBMITTED BY:								-				
Department	Diesel Techn	Diesel Technology			Colle	ge/Sch	001	UAF/	СТС			
Prepared by	Julie Wegne	r			Phone			455-2902				
Email Contact	jmwegner@a	alask	<u>ka.edu</u>		Facul	ty Con	tact	Brian	Ren	cher 455-	2843	
1. ACTION D	ESIRED (CHECK ONE	:):	Tria	l Cour	se			New C	ours	e XX	x	
2. COURSE I	DENTIFICATION	√:	Dept	DS	SLT	Cours #	e	F110		No. of redits	2.	.0
Justify upper/lower division status & number of credits:												
3. PROPOSED	COURSE TITLE	::			В	asic Ind	ıstrial	Fabricat	ion			
4. To be CR YES/NO	OSS LISTED?		NO	I	f yes, Dept:			Cours	e #		1	
(Requires signatu	approval of bo res.)	th de	epartment	s and o	leans in	volved	. Ado	l lines	at e	nd of for	m for	such
5. To be STA YES/NO	ACKED?		NO	I	f yes, Dept.			Cours	se #		]	
6. FREOUENC	Y OF OFFERING	·• [	Fall Se	mester ev	erv vear				-			
				Spring,		-				ed Years, rrants	or Od	d-
	& YEAR OF FI if approved b (2012-13)			G	A	Y2013-1	4					
compressed in	hours may not nto fewer than thermore, any c	six	weeks mu	st be a	pproved	by the	coll	ege or	schoo	ol's curri	culum	
COURSE FOR			1 X	2	3		4	1	5		eks t seme	
OTHER FORM (specify)	OTHER FORMAT 5 hours a day for 10 days (1 + 2)											
Mode of delivery (specify lecture, field trips, labs, etc)Lecture and Lab												
9. CONTACT HOURS PER WEEK: 1 LECTURE 2 LAB PRACTICUM hours /week												
of lab in a minutes of y the syllabu	credits are bas science course practicum=1 cre s. See <u>http://w</u> -for-computing-	e=1 c edit. www.u	credit. . 2400-8 uaf.edu/u	1600 mi 000 mir afgov/f	nutes i utes of aculty-	n non-s interr senate/	scienc nship= ' <mark>curri</mark>	e lab=1 1 credi culum/c	. cred	dit. 2400 This must		with
OTHER HOURS	(specify											

#### 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 for the baccalaureate core?		-		YES:	NO:	x
	F YES, check which core required of a line of the second s	uirements it o	could be us Intensive,			l Scienc	
	Format 6		Format 7			Format	8
cr	this course repeatable for edit?	YES			x		
b	astification: Indicate why e repeated (for example, the different theme each time).	e course follo					
н	ow many times may the course	e be repeated	for credit	?		2	TIMES
	If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?					C	REDITS
	f the course can be repeated aximum number of credit hour					d	REDITS

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

Χ PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

#### 14. PREREQUISITES None

1

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 yo approval? Yes/No For consumable materials	our dean to the Provost for fee	Yes
17. PREVIOUS HISTORY		
Has the course been offered as s previously? Yes/No	pecial topics or trial course	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 X	X Ye	s		Book	selected:	Welding	Principles	and	Applications	
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#### 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.

			Date	
Signature, Chair,	Diesel	Technology		
Program/Department of:				
			-	
			Date	
Signature, Chair, College/School				
Curriculum Council for:				
			_	
			Date	
Signature, Dean, College/School of:				
			-	
			Date	
Signature of Provost (if applica	ble)			

Offerings above the level of approved programs must be approved in advance by the Provost.

#### 20. IMPACTS ON PROGRAMS/DEPTS

Yes

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#### APPROVALS: Add additional signature lines as needed.

AL TI		
11/11/1 IM	Date	10-9-1-2
Signature, Chair, Diesel Technology		<i>,</i>
Program/Department of:		
-20 Hunted	Date	11-6-12
Cignature Chain Collogs (School Curriculu	12000	
Council For:		
Marke Navar	Date	
	Daco	
Signature, Dean, College/School		
of: PI-P	12/21.	<u>, /2</u>
Tithe Juny (theo		
	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 PF	RIOR TO SUBMISSION TO THE GOVERNANCE OFFICE
	Date
Signature, Chair Faculty Senate Review Committee:	Curriculum ReviewGAAC
	Core ReviewSADAC

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

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curr Council for:	iculu	
Pater Funn	Date /-	2/3/12
Signature, Dean, College/School of:	erco	. /

## 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 item listed below are included. If items are missing or unclear, the proposed course (or changes to it may be <u>denied</u>.

#### 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,  $\Box$  number,  $\Box$  credits,  $\Box$  prerequisites,  $\Box$  location,  $\Box$  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, dedition/publisher.
- $\Box$  Supplementary readings (indicate whether  $\Box$  required or  $\Box$  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
- Description in syllabus must be consistent with catalog course description.

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

#### 6. Gauge Student Learning Outcomes (more specific)

#### 7. Instructional methods:

Describe the teaching techniques (eg: 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. <u>Be specific</u> 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.

# DSLT F110 – BASIC INDUSTRIAL FABRICATION

Instructor:	Brian	Rencher
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<b>Class Dates:</b>	
Room:	147 Hutch
<b>Office Hours:</b>	2:00pm – 9:00pm
<b>Office Phone:</b>	907-455-2843
Cell Phone:	907-460-6332
E-mail:	bkrencher@alaska.edu

# Hours:Monday – FridayTheory3:00pm – 5:00pmDinner5:00pm – 5:30pmShop/Lab5:30pm – 8:30pm

## **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:

Attendand	ce			25%
Instructor	25%			
Exams	50%			
GRADE				
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 (8<sup>th</sup> 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°

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 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