

Submit original with signatures + 1 copy + electronic copy to UAF Governance.

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

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	Civil and Environmental Eng.	College/School	CEM
Prepared by	Robert Perkins	Phone	474 7694
Email Contact	raperkins@alaska.edu	Faculty Contact	Robert Perkins

1. ACTION DESIRED (CHECK ONE):	Trial Course	<input type="checkbox"/>	New Course	<input checked="" type="checkbox"/>
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2. COURSE IDENTIFICATION:	Dept	CE	Course #	F656G	No. of Credits	1
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Justify upper/lower division status & number of credits:

Course is intended for professional students who are college graduates. Credits are based on contact minutes and content. They are roughly one-third of a regular three-credit graduate course.

3. PROPOSED COURSE TITLE:	Environmental Laws and Permitting
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4. To be CROSS LISTED? YES/NO	No	If yes, Dept:	Course #
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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? YES/NO	No	If yes, Dept.	Course #
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6. FREQUENCY OF OFFERING:	As demand warrants
	Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) – or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (if approved)	As demand warrants
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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.

COURSE FORMAT: (check all that apply)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6 weeks to full semester
OTHER FORMAT (specify)	Two 2 hour and 15 minute lectures per week for three weeks delivered face-to-face or via video conferencing.					
Mode of delivery (specify lecture, field trips, labs, etc)	Lectures					

9. CONTACT HOURS PER WEEK:	4.5	LECTURE hours/weeks	<input type="checkbox"/>	LAB hours /week	<input type="checkbox"/>	PRACTICUM hours /week
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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/cd/credits.html> for more information on number of credits.

OTHER HOURS (specify type)	N/A
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10. **COMPLETE CATALOG DESCRIPTION** including dept., number, title and credits (50 words or less, if possible):

CE F656G, Environmental Laws and Permitting, 1 credit

Develop a broad understanding of the environmental laws that affect engineering projects, and some specific knowledge of the permits and regulatory requirements specific to AKDOT projects. Understand the work effort required for permitting and the budgeting and scheduling of the permitting process. Understand our agency compliance and the contractual implications of third party (contractor) actions

11. **COURSE CLASSIFICATIONS:** (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities

S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core?

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

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 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.

LETTER:

X

PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. **PREREQUISITES**

None

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

RECOMMENDED

Admission to the Graduate Certificate in Construction Management program

Classes, etc. that student is strongly encouraged to complete prior to this course.

15. **SPECIAL RESTRICTIONS, CONDITIONS**

16. **PROPOSED COURSE FEES**

\$

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

Yes/No

17. **PREVIOUS HISTORY**

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

Yes/No

Yes

If yes, give semester, year, course #, etc.:

January 2008, CE 693

18. **ESTIMATED IMPACT**

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

These courses were approved by the Board of Regents for special tuition and are expected to be self-supporting

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	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No library involvement
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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)

The Graduate Certificate in Construction Management and its courses was approved by the CEE faculty and the CEM dean.

21. POSITIVE AND NEGATIVE IMPACTS

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

This course follows the New Degree Program Request which examined the growth in the CEE department. No additional positive or negative impacts from this course are likely.

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.

This course is part of a UAF CEE outreach to package our graduate classes in a way that is convenient to students and their employers. This outreach was formalized in a New Degree Program Request for a Graduate Certificate in Construction Management which was approved by the UA Board of Regents in September 2009. The courses in this program grew out of a needs assessment by UAF CEE of Alaska engineering employers, including governments, consultants, and contractors, that indicated that courses of about one credit's intensity were best. The classes are being taught by UAF faculty, emeritus faculty, or appropriate adjuncts approved by the CEE faculty and Chair. All classes feature an assessment process: tests, reports, presentations, and/or graded homework.

APPROVALS:

		Date	
Signature, Chair, Program/Department of:			
		Date	
Signature, Chair, College/School Curriculum Council for:			
		Date	
Signature, Dean, College/School of:			
		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	
Signature, Chair, UAF Faculty Senate Curriculum Review Committee		

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

	Date	
Signature, Chair, Program/Department of:		

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

	Date	
Signature, Dean, College/School of:		

Overview of environmental laws, regulations and permits relating to construction

CE 656G 1 Credit

Prerequisites: None. Recommended: College degree in engineering or science or any college degree with construction experience

Meets Monday and Wednesday in the UAF Center for Distance Education conference room, corner of University and Davis Rd. 3PM to 5:15 PM, January 28 to February 13, 2008.

Instructor: Dr. Robert Perkins, PE, 253 Duckering, 474 7694, ffrap@uaf.edu, Office Hours 9:30 to 12, Tues and Thurs or by appointment.

There is no required textbook. There will be paper handouts and/or electronic references. Students will be required to download courts cases from the web.

Goals, Description, and Schedule

Goal: Develop a broad understanding of the environmental laws that affect engineering projects, and some specific knowledge of the permits and regulatory requirements specific to AKDOT projects. Understand the work effort required for permitting and the budgeting and scheduling of the permitting process. Understand our agency compliance and the contractual implications of third party (contractor) actions.

Class 1 Monday, 28 January 2008

Learning Goals:

1. Understand how the permitting process fits into the overall project.
 2. Appreciate the myriad permits that may be required for a project of moderate complexity and their interaction to the project development.
 3. Understand the legal foundations for the permitting process
 4. Permit provisions and stipulations
 5. Be able to use web resources to find laws and regulations
 6. Be familiar with an outline history of environmental laws and the main laws likely to affect construction projects.
- 1) History
 - 2) Legal Framework
 - a) Laws, regulations, policy, procedures, permits
 - b) Federal vs. State Administration
 - i) Primacy
 - ii) Local government
 - 3) Overview of Federal and State Laws
 - a) Time scale
 - 4) Start Class Notebook

How to cite a law and regulation, state and federal

Homework. In a Word document: 1. Write a short paragraph about which regulation or permit seems to give you issues/problems in your work. Describe in general way your interaction with the permit. 2. Look up the regulation on the Internet. At the beginning of the section that interests you (or of the entire regulation) note the laws upon which the regulation is founded. Look up those laws and note the titles. Look up the sections and note the topic of the section. Write a short table with the referenced names and the referenced laws and sections and their topic. Email the instructor with the Word document as an Attachment. Make sure the SUBJECT of your email say: "Environmental Overview HW 1." Be prepared to discuss what you found in class on Wednesday.

Class 2 Wednesday, 30 January 2008

Learning Goals:

1. Be familiar with an outline history of environmental laws and the main laws likely to affect construction projects.
2. Understand the NEPA process.
3. Understand some exemptions
4. Review your agencies' NEPA policies
5. Understand why the NEPA process can take many years on a complex project.
6. Understand the NPDES permit process
7. Understand State clean water requirements.

- 1) NEPA overview
 - a) General permits
- 2) CWW
 - a) Wetlands
 - b) Oil Spill

HW 2.) Look up Buford EIS, laws and issues. Pick one and give some thought to the agencies involved and that agencies involvement in the NEPA process. Be prepared to discuss this in class. Look at DOT NEPA process, identify CE,

Class 3 Monday, 4 February 2008

1. Corps wetland permits, other Corps permits
2. Understand the Storm water permit process
 3. Know the main provisions of the Clean Air Act Clean air act,
 4. Know what CAA permits required and what the issue are in Alaska

1) Guest Lecturer, Cam Leonard, DEC attorney

- a) CWA General
- b) Current Alaska CWA issues
- c) Permitting large projects
- 2) CAA,
 - a) Asbestos, pollution
- 3) CZMA
 - a)
- 4) State
 - a) DNR Permits
 - b) ADFG
- 5) Others and Local
- 6) Who administers in AK?

HW 3

Start the Permit Notebook Project

Class 4 Wednesday, 6 February 2008

Learning goals:

1. Understand the Coastal Zone Management consistency

2. Learn what other permits are often required in Alaska and what their main provisions are. RCRA, CERCLA, TSCA, SDW
 3. Be able to explain the NEPA process.
 4. Understand your agency's relation to NEPA
 5. How does historic preservation
 6. Understand how other environmental laws impact projects
- 7) Guest Speaker Stormwater
 - 8) [Defer] QUIZ on Federal Law terms
 - 9) More on NEPA
 - a) EIS, EA, FONSI
 - b) FHWA mandated process
 - c) DOT procedures
 - d) Other agency

10) Historic Preservation

HW 4

Draw an EPA Stormwater Permit. Take two cases, a construction project of 4 acres and a project of 6 acres. There may be ESA and TMDL issues, explain them. Fill out the permit paperwork (more after today's lecture). For the homework we will assume we don't need an Alaska or MoA permits. Probably easiest to download the website to your desktop using "save," then use Word to open the file. Then "save as" a word document, and work from that. You can make up the names of your company, project, etc., but be realistic about the facts. Be prepared in class 5 to discuss your organization for obtaining such permits. Who writes the permit, level of project development/design needed for the permit, time needed for permit, who in organization does the work, manhours/cost to support the permit, main compliance issues, what information don't we have.

Class 5, Monday, 11 February 2008

Learning Goals

1. Understand the relation of the permitting process to the project plan
2. Understand the risks of permitting to the project
3. Key liability matters
4. Develop an appreciation for the role of the public in the process

Guest Lecture, Francis Isgrigg, Planning and Organizing for Permits

Wetlands permits, Engineering Project Process

11) Permits

- a) Planning and Scheduling
- b) Negotiations of stipulations, cost and schedule
- c) Who handles within our organization
- d) Right of Way
- e) Preconstruction

12) Compliance

- a) Stipulations
- b) Penalties

13) Public involvement in permits

- a) Meetings
- b) Comments
- c) Risk communication

14) Class presentations

HW 5 From your permit project, take two permits (other than stormwater and wetlands) and examine who in my organization is responsible, does, estimate time, schedule,

Look at stipulations for a project. Who is responsible. What can happen, need for public meetings?

15) Guest Lecture, DEC stormwater

16) Contractor vs. Owner

- a) A little about contracts
- b) Permits and stipulations
 - i) Contractor provisions
 - ii) changes
- c) Contract language
 - i) Differing site conditions
 - ii) Delays

17) Final in-class exam

- a) Presentations on permit
- b)

Evaluation: Grades will be awarded based on the instructor subjective evaluation of the student's attainment of the course goals. Input to that evaluation will include: Class attendance and participation, 10%, quiz, 20%, assignments 30%, project 40%.

Possible Guest Speakers:

ADEC, EPA, Corps regulators

FNSB Planning