

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.

<b>TRIAL COURSE OR NEW COURSE PROPOSAL</b>
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**SUBMITTED BY:**

Department	<b>Civil and Environmental Eng.</b>	College/School	<b>CEM</b>
Prepared by	<b>Robert Perkins</b>	Phone	<b>474 7694</b>
Email Contact 5	r o b e r t . p e r k i n s @ c e m . u a f . e d u		

This course will build on student's knowledge of estimating procedures and practices. It will provide insight into the effects of inflation and risk and will examine the methods to incorporate risk sharing in an estimate.

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

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:

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

No

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

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

x

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:**

**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:		

# Outline Syllabus

## Advanced Construction Estimating

### 1. Course information:

Advanced Construction Estimating, CE F654B, One credit,  
Prerequisites: Recommended Admission to the Graduate Certificate in Construction Management Program.

*Location and Meeting Time* will be specific to each offering of the course.

### 2. Instructor (and if applicable, Teaching Assistant) information:

*Instructors Name, Office Location, Office Hours, as well as Telephone and Email* contact information will be specific to each offering of the course.

### 3. Course readings/materials:

Handout of text material and assigned materials students will download from the Internet

### 4. Course description:

This course will build on student's knowledge of estimating procedures and practices. It will provide insight into the effects of inflation and risk and will examine the methods to incorporate risk sharing in an estimate.

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

Improve the student's skills in managing construction and project estimating.

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

Students will learn to incorporate advanced concepts into project construction estimates. Understand the elements of risk and how to account for risk in estimates or share risk through the construction estimate.

### 7. Instructional methods:

Face to face lecture and remote lectures via video conferencing, student presentations and reports. Students will use the Internet to download some instruction material.

### 8. Course calendar:

#### Class 1

Introduction

General Conditions and Overhead

## Class 2

Environmental Estimating

Risk Sharing

## Class 3

Costs of Scheduling Modifications

Profit Analysis

## Class 4

Quiz

Estimating Costs of Professional Services

Contingencies and Allowances

## Class 5

Estimating Technology

## Class 6

Class Presentations

### **9. Course policies:**

Due to the limited number of classes, attendance and class participation is expected in all classes, unless arranged otherwise with the instructor, and will be considered in determining final grade. Plagiarism will not be tolerated.

### **10. Evaluation:**

The final grade will be determined on the following basis:

Final presentation (written: 40%; oral: 15%)	55%
Quiz	20%
Class participation	13%
Attendance (6 @2%)	12%

### **11. Support Services:**

Administrative services for the course are provided by the Center for Distance Education 907-479-4757 and technical assistance by Video Conferencing Services 1-800-910-9601

### **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.

We will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities.