10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

CE F653B, Project Network Scheduling, 1 credit

Use of network scheduling in owner and contractor organizations, CPM, PERT, and Linear Scheduling Method. Resource allocation for single and multiple projects. Analysis of float/slack and delays. Probabilistic methods and graphical presentation.

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 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

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Date

Outline Syllabus

Project Network Scheduling

1. Course information:

Project Network Scheduling, CE F653B, One credit, Prerequisites: Recommended Admission to the Graduate Certificate in Construction Management Program. Recommended one prior course in scheduling.

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. Students will download trail copies of scheduling software. Readings, such as : Linear Scheduling Model: Development of Controlling activity path, Harmelink, ASCE Journal of Construction Engineering and Management, 1998. "Enhanced" PDM - Concepts & Benefits, Scott C. Herold, P.E., Black & Veatch Corporation.

4. Course description:

Use of network scheduling in owner and contractor organizations, CPM, PERT, and Linear Scheduling Method. Resource allocation for single and multiple projects. Analysis of float/slack and delays. Probabilistic methods and graphical presentation.

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

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8. Course calendar:

Class 1

Introduction

Scheduling basics: CPM, Linear, Repetitive Activity, learning curve, deterministic vs. probabilistic. Programs: Project, Prima Vera, others.

Class 2

Constraints of date, time, and resource. Enhancements and effects on schedule. Presentations to technical audiences and public. Guest Lecture: Contractor.

<u>Class 3</u> Precedence Diagramming other than CPM. Flow charts. GERT. Guest Lecturer: Owner.

<u>Class 4</u> Quiz – Hands on scheduling exercise.

Class 5

Use of schedules for claims and changes. Cases. What was and wasn't important. Contact clauses.

<u>Class 6</u> 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: 30%; oral:	25%) 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.