

147- UCCCh. (w/ign)

FORMAT 2

Submit originals and one copy and electronic copy to **Governance/Faculty Senate Office**
 See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

CHANGE COURSE (MAJOR) and DROP COURSE PROPOSAL

SUBMITTED BY:

Department	CEE	College/School	CEM
Prepared by	Andrew Metzger	Phone	907.474.6120
Email Contact	atmetzger@alaska.edu	Faculty Contact	Andrew T. Metzger

1. COURSE IDENTIFICATION:

Dept Course # No. of Credits

COURSE TITLE

2. ACTION DESIRED:

Change Course If Change, indicate below what change. Drop Course

NUMBER	<input type="text"/>	TITLE	<input type="text"/>	DESCRIPTION	<input type="text"/>
PREQUISITES	<input type="text"/>			FREQUENCY OF OFFERING	<input checked="" type="checkbox"/>
CREDITS (including credit distribution)	<input type="text"/>		<input checked="" type="checkbox"/>	COURSE CLASSIFICATION	<input type="text"/>
CROSS-LISTED	<input type="text"/>	Dept.	<input type="text"/>	(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)	
STACKED (400/600) Include syllabi.	<input type="text"/>	Dept.	<input type="text"/>	Course #	<input type="text"/>
OTHER (please specify)	Change to a (3+0) course; the lab for this course has not been offered for several years, and will not be offered in the future. Offered in Spring.				

3. 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 (specify all that apply)
 Mode of delivery (specify lecture, field trips, labs, etc)

4. 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 X

IF YES, check which core requirements it could be used to fulfill:
 O = Oral Intensive, W = Writing Intensive, Natural Science,
 Format 6 also submitted Format 7 submitted Format 8 submitted

5. 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

6. **CURRENT CATALOG DESCRIPTION AS IT APPEARS IN THE CATALOG: including dept., number, title and credits**

CE 433 Reinforced Concrete Design
3 Credits Offered Fall

Behavior of reinforced concrete members. Design philosophies and current practices. Flexural members, to include: rectangular, T-beams and one-way slabs. Crack control, anchorage, development lengths and deflections. Axially loaded members. Laboratory experiments. Current ACI 318 Code used. Special fees apply *Prerequisites: CE F331; ES F331. (2+3)*

7. **COMPLETE CATALOG DESCRIPTION AS IT WILL APPEAR WITH THESE CHANGES: (Underline new wording strike through old wording and use complete catalog format including dept., number, title, credits and cross-listed and stacked.) PLEASE SUBMIT NEW COURSE SYLLABUS. For stacked courses the syllabus must clearly indicate differences in required work and evaluation for students at different levels.**

CE 433 Reinforced Concrete Design
3 Credits Offered ~~Fall~~ Spring

Behavior of reinforced concrete members. Design philosophies and current practices. Flexural members, to include: rectangular, T-beams and one-way slabs. Crack control, anchorage, development lengths and deflections. Axially loaded members. ~~Laboratory experiments.~~ Current ACI 318 Code used. Special fees apply *Prerequisites: CE F331; ES F331. (~~2+3~~) (3+0)*

8. **IS THIS COURSE CURRENTLY CROSS-LISTED?**

YES/NO NO

If Yes, DEPT

NUMBER

(Requires written notification of each department and dean involved. Attach a copy of written notification.)

9. **GRADING SYSTEM: Specify only one**

LETTER:

PASS/FAIL:

10. **ESTIMATED IMPACT**

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

none

11. **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

12. **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)

Civil Engineering Department

13. **POSITIVE AND NEGATIVE IMPACTS**

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

Reinforced Concrete Design is a necessary skill for all sub-disciplines of Civil Engineering. Offering this course each spring will provide students with the opportunity to gain this necessary knowledge prior to graduation. Offering the course in the spring will not interfere with the curriculum flow of prerequisites and required courses.

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. If you ask for a change in # of credits, explain why; are you increasing the amount of material covered in the class? If you drop a prerequisite, is it because the material is covered elsewhere? If course is changing to stacked (400/600), explain higher level of effort and performance required on part of students earning graduate credit. Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the course is not compromised as a result.

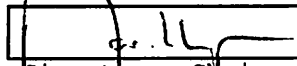
This course has traditionally been listed as a (2+3) course and offered in the fall. Review of the course offerings in the CEE department indicated that CE 433 Reinforced Concrete Design would accommodate more students wanting to take the course if it were offered in the spring.

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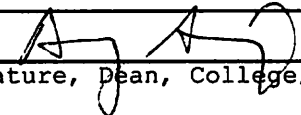
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APPROVALS:


Signature, Chair,
Program/Department of: DAVID L. BARCHÉ Date 2-11-11

Webasmitz Misra
Signature, Chair, College/School Curriculum
Council for: CEM Date 2/23/11


Signature, Dean, College/School
of: CEM Date 2/24/11

Signature of Provost (if applicable) Date _____

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.

Signature, Chair, UAF Faculty Senate Curriculum
Review Committee Date _____

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

Signature, Chair,
Program/Department of: _____ Date _____

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

Signature, Dean, College/School
of: _____ Date _____

ATTACH COMPLETE SYLLABUS (as part of this application).

Note: The guidelines are online: <http://www.uaf.edu/uafgov/faculty/cd/syllabus.html>
The department and campus wide curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course change will be denied.

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, number, credits, prerequisites, location, 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, edition/publisher.

Supplementary readings (indicate whether required or 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. 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. Be specific 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.)

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 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities."

**UNIVERSITY OF ALASKA FAIRBANKS DEPARTMENT OF CIVIL &
ENVIRONMENTAL ENGINEERING**

CE 433 Reinforced Concrete Design Syllabus Spring 2011 – 3 Credits

Instructor: Paul V. Perreault, MSCE, PE

Office: Duckering, Room 345
Phone: 3224753 (ask: "Is this an okay time to talk?")
Email: pvperreault@alaska.edu, or engineer@cbna.org

Time: M, W, F 11:45a – 12:45p

Location: Duckering, Room 344

Office Hours: 9:00a – 11:00a M,W or by appointment. And, if you see me, regardless of where, I am open to your questions. Just ask, "Is this an okay time to talk?"

Prerequisites: CE F331, ES F331

Required Texts: Building Code Requirements for Structural Concrete and Commentary; ACI 31808. American Concrete Institute, Farmington Hill, MI. 2008. (Please bring this text and a calculator to every class.)

Reinforced Concrete: Mechanics & Design. Wight, James K., MacGregor, James G. Pearson Prentice Hall. Upper Saddle River, NJ. 5th ed. 2009. ISBN 10: 0132281414; 13: 9780132281416

Other References: Concrete Reinforcing Steel Institute Design Handbook. (Selected pages to be provided by the instructor.) Many, many weblinks to other references. NOTE: These additional references are for your general information. First, use the ACI code and the course text.

Course Description: Behavior of reinforced concrete members. Design philosophies and current practices. Flexural members, to include: rectangular, T-beams and one-way slabs. Crack control, anchorage, development lengths and deflections. Axially loaded members.

Course Goals: This class is designed to be a first course in the design of steel reinforced concrete construction. General design philosophy as well as building components and load paths will be discussed. Concepts surrounding concrete as a building material will be explored. The design of elementary building components using steel reinforced concrete will be studied. The course is taught in a lecture format.

Course Content, Selected Portions of:

Week 1	Concrete What is concrete?
Week 2	Concrete constituents Concrete testing standards
Week 3	Concrete mix design
Week 4	Design Criteria/ Building Codes
Week 5	Loads and Load Combinations Reinforcing Steel
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Week 11	Column and Wall Design
Week 12	Designing for Combined Compression and Bending
Week 13	Reinforcement detailing
Week 14	Design of Concrete Footings Anchor Bolt Design

Student Learning Outcomes: the student should leave the course with knowledge of how to use ACI 318 to design reinforced concrete elements. The level of competency should be consistent with an entry-level practicing engineer and Professional Engineering Exam questions on the topic.

Evaluation: Grades are based on absolute scores

Homework	40%
Project	15%
Midterm Exam	20%
Final Exam	20%
Classroom Participation	5%

Course Policies: Regular attendance and participation is expected, as well as professional behavior in class (show up on time, no talking during class, no walking out of/back in to class, no wearing headphones, no texting, and cells phones and computers are to be turned off in class, no eating in class – drinks are permissible).

Disability 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 Disability Services (203 WHIT, 474-7043) to provide reasonable accommodations to students with disabilities.

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8. **IS THIS COURSE CURRENTLY CROSS-LISTED?**

YES/NO NO

If Yes, DEPT

NUMBER

(Requires written notification of each department and dean involved. Attach a copy of written notification.)

9. **GRADING SYSTEM: Specify only one**

LETTER: X

PASS/FAIL:

10. **ESTIMATED IMPACT**

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

none

11. **LIBRARY COLLECTIONS**

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No Yes X

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Civil Engineering Department

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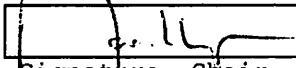
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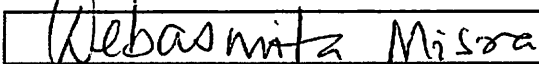
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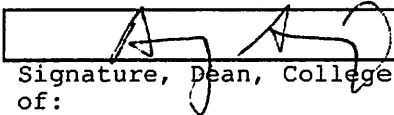
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 Date 2-11-11
Signature, Chair, Program/Department of: DAVID L. BARTHE

 Date 2/23/11
Signature, Chair, College/School Curriculum Council for: CEM

 Date 2/24/11
Signature, Dean, College/School of: CEM

Signature of Provost (if applicable) Date

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**UNIVERSITY OF ALASKA FAIRBANKS DEPARTMENT OF CIVIL &
ENVIRONMENTAL ENGINEERING**

CE 433 Reinforced Concrete Design Syllabus Spring 2011 – 3 Credits

Instructor: Paul V. Perreault, MSCE, PE

Office: Duckering, Room 345
Phone: 3224753 (ask: "Is this an okay time to talk?")
Email: pvperreault@alaska.edu, or engineer@cbna.org

Time: M, W, F 11:45a – 12:45p

Location: Duckering, Room 344

Office Hours: 9:00a – 11:00a M,W or by appointment. And, if you see me, regardless of where, I am open to your questions. Just ask, "Is this an okay time to talk?"

Prerequisites: CE F331, ES F331

Required Texts: Building Code Requirements for Structural Concrete and Commentary; ACI 31808. American Concrete Institute, Farmington Hill, MI. 2008. (Please bring this text and a calculator to every class.)

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Other References: Concrete Reinforcing Steel Institute Design Handbook. (Selected pages to be provided by the instructor.) Many, many weblinks to other references. NOTE: These additional references are for your general information. First, use the ACI code and the course text.

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