

147- UCCr. (sign)

FORMAT 2

Submit original and one copy and electronic copy to Governance/Equality Senate Office

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

CR 433 Reinforced Concrete Design

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

The department and campus wide curriculum committees will review the syllabus to

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

CE 433 Reinforced Concrete Design Syllabus Spring 2011 – 3 Credits

INSTRUCTOR: M. D. ... MSCE, PE

Email: nvnerreault@alaska.edu or engineer@chna.org

Time: M, W, F 11:45a – 12:45p

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
Week 6	Beam Design – bending
Week 7	Beam Design – shear
Week 8	Beam Design – torsion

Week 9 Beam Design – serviceability

Week 10 Beam Design – deep beams
Concrete Slab 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

Submit originals and one copy and electronic copy to Governance/Faculty Senate Office

Change Course (Major) and Drop Course Proposal

CHANGE COURSE (MAJOR) and DROP COURSE PROPOSAL

SUBMITTED BY:

Department

CEE

College/School

CEM

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.

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

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

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

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

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

Week 8	Beam Design – torsion
Week 9	Beam Design – serviceability
Week 10	Beam Design – deep beams Concrete Slab Design
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%
Quizzes	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 cell phones and computers are to be turned off in class, no