CE 183: Concrete Technology

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CE 183: CONCRETE TECHNOLOGY

In Workflow

- 1. CE Committee Chair (richard.armstrong@csus.edu)
- 2. CE Chair (khan@csus.edu)
- 3. ECS College Committee Chair (figgess@csus.edu)
- 4. ECS Dean (arad@csus.edu)
- 5. Academic Services (catalog@csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (james.german@csus.edu; celena.showers@csus.edu; renee.leonard@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (catalog@csus.edu)
- 10. Registrar's Office (wlindsey@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Tue, 08 Feb 2022 18:28:52 GMT

Richard Armstrong (richard.armstrong): Approved for CE Committee Chair

2. Tue, 08 Feb 2022 22:43:11 GMT

Ghazan Khan (khan): Approved for CE Chair

3. Fri, 11 Mar 2022 17:18:34 GMT

Gareth Figgess (figgess): Approved for ECS College Committee Chair

4. Fri, 11 Mar 2022 17:37:54 GMT

Behnam Arad (arad): Approved for ECS Dean

New Course Proposal

Date Submitted: Wed, 02 Feb 2022 00:44:34 GMT Viewing: CE 183 : Concrete Technology Last edit: Wed, 02 Feb 2022 00:44:33 GMT Changes proposed by: Jose Garcia (223000076)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Jose Garcia	i.garcia@csus.edu	916-278-4504

Catalog Title:

Concrete Technology

Class Schedule Title:

Concrete Technology

Academic Group: (College)

ECS - Engineering & Computer Science

Academic Organization: (Department)

Civil Engineering

Will this course be offered through the College of Continuing Education (CCE)?

Nο

Catalog Year Effective:

Spring 2023 (2022/2023 Catalog)

Subject Area: (prefix) CE - Civil Engineering

Catalog Number: (course number)

183

Course ID:	(For	administrative	use	only.))
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203234

Units:

3

Is the primary purpose of this change to update the term typically offered or the enforcement of requisites at registration?

Nο

In what term(s) will this course typically be offered?

Spring term only

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course?

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This course replaces the following experimental course:

CE 196H - Concrete Technology

This course complies with the credit hour policy:

Yes

Justification for course proposal:

Class was proposed as an experimental course (CE 196H) and has been taught twice (Spring 2020, Spring 2021) and is scheduled for Spring 2022. In the Spring 2020 semester, 39 students enrolled in the class, and the enrollment was 33 for Spring 2021. The enrollment in the Spring 2022 term is expected to be over 32. Class will become permanent course.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

History of portland cement, production, hydration, aggregates, supplementary cementitious materials, chemical admixtures, fresh and hardened concrete properties, concrete mixture design, and concrete construction. Introduction to concrete durability, concrete repair, and advances in concrete technology.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Does this course have prerequisites?

Yes

Prerequisite:

ENGR 112.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

No

Graded:

Letter

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Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Discussion

Discussion Classification

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

Discussion Units

3

Is this a paired course?

Nο

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

Nο

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."

Upon completing this course, a student will be able to:

- 1. Identify the different materials used in cement and concrete production.
- 2. Describe the chemical reactions occurring during cement production and in fresh and hardened concrete.
- 3. Evaluate the effects of different supplementary cementitious materials and chemical admixtures incorporated into concrete.
- 4. Identify proper fabrication and testing procedures of concrete.
- 5. Discuss advanced concepts in the area of concrete materials.

Attach a list of the required/recommended course readings and activities:

CE 183 syllabus.docx

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

Homework Assignments (1-5)

Quizzes (1-5)

Exams (1-5)

For whom is this course being developed?

Majors in the Dept

Is this course required in a degree program (major, minor, graduate degree, certificate?)

NO

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

Nο

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines Knowledge of human cultures and the physical and natural world Personal and social responsibility

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Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

Please attach any additional files not requested above:

CE 196H Enrollment Info.pdf

Key: 14640