# CE 170L: SOIL MECHANICS LABORATORY

#### In Workflow

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- 2. CE Chair (fellb@csus.edu)
- 3. ECS College Committee Chair (troy.topping@csus.edu)
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# **Approval Path**

1. Sat, 12 Oct 2019 03:22:33 GMT

Julie Fogarty (fogarty): Approved for CE Committee Chair

2. Mon, 14 Oct 2019 18:01:08 GMT

Benjamin Fell (fellb): Approved for CE Chair

3. Fri, 25 Oct 2019 16:32:45 GMT

Troy Topping (troy.topping): Approved for ECS College Committee Chair

4. Fri, 25 Oct 2019 16:54:57 GMT

Kevan Shafizadeh (kevan): Approved for ECS Dean

# **New Course Proposal**

Date Submitted: Tue, 17 Sep 2019 16:24:55 GMT

# Viewing:CE 170L: Soil Mechanics Laboratory Last edit:Sat, 05 Oct 2019 04:41:00 GMT

Changes proposed by: Richard Armstrong (211213341)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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#### **Catalog Title:**

Soil Mechanics Laboratory

#### **Class Schedule Title:**

Soil Mechanics Laboratory

## Academic Group: (College)

ECS - Engineering & Computer Science

### **Academic Organization: (Department)**

Civil Engineering

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

No

# **Catalog Year Effective:**

Fall 2020 (2020/2021 Catalog)

# Subject Area: (prefix) CE - Civil Engineering

## **Catalog Number: (course number)**

170L

Course ID: (For administrative use only.)

**TBD** 

Units:

1

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

Fall, Spring

Does this course require a room for its final exam?

No, final exam does not require a room

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

#### Justification for course proposal:

There are high DFW rates for many of the combined CE lecture/lab courses. This leads to delayed graduation since repeating students need to be accommodated and those seeking to take the course for the first time are prevented from enrolling in the limited laboratory seats.

Separating the civil engineering lab and lecture experiences will:

- 1) open up the limited lab seats available for students first attempting the course;
- 2) enable students who have failed the combined lab/lecture courses to better spend their time on the lecture content when repeating the course if they have already successfully completed the lab activities

Undergraduate CE courses are being renumbered to clarify course pre- and co-requisites and topic areas to help students plan their path to graduation. Prerequisites numbers (not courses) are being changed to reflect course number changes.

The current offering of the 4-unit CE 171A will be separated into a 3-unit lecture only session (CE 170C) and a 1-unit laboratory only session (CE 170L). The new offerings of CE 170C and CE 170L are to be taken by student concurrently.

Through curriculum paper forms in 2016, each CE course had the "Not currently enrolled in CE XXX" as a prerequisite approved, so that students could not register for a "CE" prefix course if they were currently enrolled in it. This was to prevent students who thought they were failing from giving up or taking up a seat they didn't need if they passed the course. That prefix managed to make it into the online system for only one or two classes and is being put through curriculum workflow again.

The writing proficiency prerequisite (WPJ) is only placed on the lab component of the course.

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

Laboratory course that supports CE 170C. Activities include soil testing and analysis of geotechnical site investigation data. Laboratory three hours.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

Nο

Does this course require safety training?

Vac

Does this course require personal protective equipment (PPE)?

Yes

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

This course requires safety training. This course requires personal protective equipment (PPE).

## Does this course have prerequisites?

Yes

#### Prerequisite:

Complete CE 1, CE 100, CE 101, and ENGR 112. WPJ Score of 70+ or equivalent. Not currently enrolled in CE 170L.

#### **Prerequisites Enforced at Registration?**

Yes

#### Does this course have corequisites?

Yes

### Corequisite:

**CE 170C** 

## **Corequisites Enforced at Registration?**

Yes

#### **Graded:**

Letter

## Approval required for enrollment?

No Approval Required

#### Course Component(s) and Classification(s):

Laboratory

## **Laboratory Classification**

CS#16 - Science Laboratory (K-factor=2 WTU per unit)

#### **Laboratory Units**

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# Is this a paired course?

Νo

## 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?

No

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

- 1) Select the appropriate soil tests for a specific type of geotechnical engineering design or analysis application
- 2) Perform common soil tests to identify physical and mechanical properties of soils
- 3) Recognize American Society for Testing and Materials (ASTM) standards for applicable soil tests
- 4) Apply laboratory test results to problem identification, quantification, and design
- 5) Interpret soil test results and develop a technical report summarize the key finding
- 6) Demonstrate the ability to write clear technical lab reports
- 7) Apply ethical decision making and professional conduct in the lab and field environment

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

CE\_170L\_Course\_Syllabus\_Armstrong.pdf

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.

Laboratory assignments (ELO 1-7)

## For whom is this course being developed?

Majors in the Dept

4

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

Yes

Has a corresponding Program Change been submitted to Workflow?

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Identify the program(s) in which this course is required:

#### **Programs:**

BS in Civil Engineering

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

No

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 Integrative learning Personal and social responsibility 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)?

No

# **GE Course and GE Goal(s)**

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

No

Key: 14130