

# CE 171A: SOIL MECHANICS

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## In Workflow

1. CE Committee Chair (fogarty@csus.edu)
2. CE Chair (fellb@csus.edu)
3. ECS Committee Chair (troy.topping@csus.edu)
4. ECS Dean (kevan@csus.edu)
5. Academic Services (torsetj@csus.edu; kme226@csus.edu; cnewsome@skymail.csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (james.german@csus.edu; celena.showers@csus.edu)
8. Dean of Graduate (cnewsome@skymail.csus.edu)
9. Registrar's Office (wwd22@csus.edu; wlindsey@csus.edu; sac19595@csus.edu; danielle.ambrose@csus.edu; vivianlg@skymail.csus.edu)
10. Catalog Editor (kme226@csus.edu; torsetj@csus.edu; cnewsome@skymail.csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

## Approval Path

1. Tue, 02 Oct 2018 05:19:48 GMT  
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Tue, 02 Oct 2018 21:46:48 GMT  
Benjamin Fell (fellb): Approved for CE Chair
3. Fri, 19 Oct 2018 17:16:47 GMT  
Troy Topping (troy.topping): Approved for ECS Committee Chair
4. Fri, 19 Oct 2018 17:43:00 GMT  
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Thu, 20 Sep 2018 22:23:32 GMT

## Viewing: CE 171A : Soil Mechanics

**Last edit: Tue, 02 Oct 2018 04:55:06 GMT**

Changes proposed by: 218645519

### Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Benjamin Fell	fellb@csus.edu	916-278-8139

### Catalog Title:

Soil Mechanics

### Class Schedule Title:

Soil Mechanics

### Academic Group: (College)

ECS - Engineering & Computer Science

### Academic Organization: (Department)

Civil Engineering

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

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

No

**Catalog Year Effective:**

Fall 2019 (2019/2020 Catalog)

**Subject Area: (prefix)**

CE - Civil Engineering

**Catalog Number: (course number)**

171A

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

107396

**Units:**

4

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

Fall, Spring

**Does this course require a room for its final exam?**

Yes, final exam requires a room

**Does this course replace an existing experimental course?**

No

**This course complies with the credit hour policy:**

Yes

**Justification for course proposal:**

**\*\*This Form A should only be approved in conjunction with the Form B and other Form As related to the package outlined in the Form B\*\***

Changing prerequisites to comply with removal/addition of courses in Program change. CE 146 is removed from the prerequisite list and the WPJ is added so that all CE courses with labs (and lab reports) require students to be proficient in writing.

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

Composition and properties of soils; soil classification; soil compaction; soil-water interaction, including permeability and seepage analyses; soil stresses; soil compressibility, consolidation, and settlement analysis; soil shear strength. Lecture three hours; laboratory three hours.

**Are one or more field trips required with this course?**

No

**Fee Course?**

No

**Course Note: (Do not include field trip or fee course notations.)**

**Does this course have prerequisites?**

Yes

**Prerequisite:**

CE 1A, CE 100, CE 101, ENGR 112, and WPJ.

**Prerequisites Enforced at Registration?**

Yes

**Does this course have corequisites?**

No

**Graded:**

Letter

**Approval required for enrollment?**

No Approval Required

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

Discussion  
Laboratory

**Discussion Classification**

CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)

**Discussion Units**

3

**Laboratory Classification**

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

**Laboratory Units**

1

**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."**

Students will be able to:

- 1) Demonstrate basic concepts and principles of soil mechanics using analytical and experimental procedures.
- 2) Calculate values related to soil composition, soil classification, soil index properties, soil-water interaction, seepage, stresses within soil, soil consolidation, and soil shear strength.
- 3) Apply soil mechanics to some Geotechnical engineering problems.

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

CE171A Syllabus F18.doc

**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, exams, and laboratory assignments (ELO 1, 2, 3)

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

Yes

**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

**Attach Accessibility Checklist: (Optional at submission. Fulfills requirement to file with Dean's office.)**

**Is this a paired course?**

No

## **University Learning Goals**

### **Undergraduate Learning Goals:**

Competence in the disciplines

Knowledge of human cultures and the physical and natural world

Integrative learning

Intellectual and practical skills

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

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

No

**Please attach any additional files not requested above:**

**Reviewer Comments:**

Key: 553