# CE 9L: PLANE AND TOPOGRAPHIC SURVEYING LABORATORY

### In Workflow

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- 11. PeopleSoft (PeopleSoft@csus.edu)

# **Approval Path**

1. Sat, 12 Oct 2019 03:22:48 GMT

Julie Fogarty (fogarty): Approved for CE Committee Chair

2. Mon, 14 Oct 2019 17:59:49 GMT

Benjamin Fell (fellb): Approved for CE Chair

3. Fri, 25 Oct 2019 16:33:22 GMT

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

4. Fri, 25 Oct 2019 16:55:31 GMT

Kevan Shafizadeh (kevan): Approved for ECS Dean

# **New Course Proposal**

Date Submitted:Sat, 12 Oct 2019 03:06:22 GMT

# Viewing:CE 9L: Plane and Topographic Surveying Laboratory

# Last edit:Sat. 12 Oct 2019 03:06:20 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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### **Catalog Title:**

Plane and Topographic Surveying Laboratory

### **Class Schedule Title:**

Plane+Topographic Survey Lab

# 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)**

91

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 is a high DFW rate 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

The current offering of the 3-unit CE 9 will be separated into a 2-unit lecture only session (CE 9) and a 1-unit laboratory only session (CE 9L). The new offerings will be co-requisites meaning students must take CE 9 and CE 9L together unless a student is repeating only one component.

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

Laboratory course that supports CE 9. Use of surveying instruments and measurement techniques in field setting. Laboratory three hours.

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?

Yes

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 and personal protective equipment (PPE).

Does this course have prerequisites?

Yes

Prerequisite:

MATH 30; MATH 30 may be taken concurrently. Not currently enrolled in CE 9L.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

Yes

# Corequisite:

CE9

**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** 

1

Is this a paired course?

Nο

Is this course crosslisted?

Nο

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. Measure distances and angles using field equipment.
- 2. Perform traverse surveys
- 3. Calculate spatial locations using field measurements and coordinate geometry.
- 4. Close traverses and calculate land areas
- 5. Interpret field measurements and prepare plans/maps.
- 6. Evaluate errors in field measurements.
- 7. Prepare accurate and legible field notes

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

CE 9L (F19).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.

Laboratory reports (ELO 1-7)

For whom is this course being developed?

Majors in the Dept

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

Yes

Has a corresponding Program Change been submitted to Workflow?

Yes

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

#### **Programs:**

**BS** in Civil Engineering

4

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 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: 14134