## **CE 131: HYDROLOGY**

#### In Workflow

- 1. CE Committee Chair (fogarty@csus.edu)
- 2. CE Chair (fellb@csus.edu)
- 3. ECS College Committee Chair (troy.topping@csus.edu)
- 4. ECS Dean (kevan@csus.edu)
- Academic Services (torsetj@csus.edu;%20212408496@csus.edu;%20cnewsome@skymail.csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- Catalog Editor (212408496@csus.edu;%20torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- 10. Registrar's Office (wwd22@csus.edu;%20wlindsey@csus.edu;%20sac19595@csus.edu;%20danielle.ambrose@csus.edu; %20h.skocilich@csus.edu;%20205109584@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

## **Approval Path**

1. Sat, 12 Oct 2019 03:21:42 GMT

Julie Fogarty (fogarty): Approved for CE Committee Chair

2. Mon, 14 Oct 2019 18:00:03 GMT

Benjamin Fell (fellb): Approved for CE Chair

3. Fri, 25 Oct 2019 16:31:06 GMT

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

4. Fri, 25 Oct 2019 16:52:45 GMT

Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted:Sat, 12 Oct 2019 03:08:47 GMT

Viewing:CE 131 : Hydrology Formerly known as: CE 138

Last edit:Sat, 12 Oct 2019 03:08:46 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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

#### **Catalog Title:**

Hydrology

#### Class Schedule Title:

Hydrology

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)** 

131

Course ID: (For administrative use only.) 107271

Units:

3

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

Fall 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?

No

This course complies with the credit hour policy:

Yes

#### Justification for course proposal:

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.

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 course description is modified to eliminate references to groundwater. Groundwater content is being removed from this elective course, since there is a new elective course that will be entirely devoted to groundwater.

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

Introduction to surface water hydrology for engineering. Evapotranspiration and infiltration prediction. Precipitation analysis, hydrograph and flood routing applications for civil engineering. Statistical applications in hydrology.

Are one or more field trips required with this course?

No

Fee Course?

Nο

Is this course designated as Service Learning?

No

Does this course require safety training?

Nο

Does this course require personal protective equipment (PPE)?

No

Does this course have prerequisites?

Yes

Prerequisite:

CE 130 and CE 130L. Not currently enrolled in CE 131.

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

#### **Discussion Classification**

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

#### **Discussion Units**

3

#### Is this a paired course?

Νo

#### 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) Delineate a watershed boundary
- 2) Estimate precipitation over a watershed
- 3) Predict evaporation and evapotranspiration based on meteorological variables using different methods
- 4) Predict infiltration based on soil and meteorological variables
- 5) Synthesize hydrographs
- 6) Identify precipitation and discharge for different return intervals using various distributions
- 7) Apply hydrologic simulation software, describe its limitations, and interpret its results

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

CE131 (F19).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 and exams - ELOs 1-6 Project - ELO 1-7

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

Nο

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?

Νo

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)?

Nο

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

Is this a General Education (GE) course or is it being considered for GE?  $\ensuremath{\mathsf{No}}$ 

Please attach any additional files not requested above:

CE131 (F19).docx

Key: 536