

CE 133: DESIGN OF URBAN WATER AND SEWER SYSTEMS

In Workflow

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Approval Path

1. Sat, 12 Oct 2019 03:21:44 GMT
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Mon, 14 Oct 2019 18:00:06 GMT
Benjamin Fell (fellb): Approved for CE Chair
3. Fri, 25 Oct 2019 16:31:15 GMT
Troy Topping (troy.topping): Approved for ECS College Committee Chair
4. Fri, 25 Oct 2019 16:53:09 GMT
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Sat, 12 Oct 2019 03:16:26 GMT

Viewing: CE 133 : Design of Urban Water and Sewer Systems

Formerly known as: CE 172

Last edit: Sat, 12 Oct 2019 03:16:25 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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Catalog Title:

Design of Urban Water and Sewer Systems

Class Schedule Title:

Design Urban Water+Sewer Sys

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)

133

Course ID: (For administrative use only.)

107411

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.

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

Hydraulic design of water distribution and sewerage systems. Computer-assisted pipe network analysis. Analysis of pump systems. Pump station design. Other selected topics.

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:

CE 130 and CE 130L. Not currently enrolled in CE 133.

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?

No

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) Describe potential public health impacts of well-designed and of poorly designed water distribution and wastewater collection systems.
- (2) Project water demand and wastewater generation volumes based on land development factors such as zoning, climate, and topography.
- (3) Conduct hydraulic analyses, by hand and using computer programs, of pressure-flow and gravity-flow pipes and pipe networks.
- (4) Size and lay out water distribution and wastewater collection piping systems based on projected flow volumes and regulatory requirements.
- (5) Develop and utilize a system curve to select a pump for water or wastewater service.
- (6) Describe selected pipe rehabilitation techniques.

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

CE133_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 (ELO 2-5)
 Projects (ELO 2-4)
 Exams (ELO 1-6)

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

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: 555