

CE 252: ENVIRONMENTAL QUALITY PROCESSES II

In Workflow

1. CE Committee Chair (fogarty@csus.edu)
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9. Catalog Editor (torsetj@csus.edu)
10. Registrar's Office (w lindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Thu, 17 Sep 2020 02:36:12 GMT
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Thu, 17 Sep 2020 16:14:16 GMT
Benjamin Fell (fellb): Approved for CE Chair
3. Thu, 01 Oct 2020 16:33:09 GMT
Gareth Figgess (figgess): Approved for ECS College Committee Chair
4. Fri, 02 Oct 2020 15:51:30 GMT
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Thu, 17 Sep 2020 02:28:52 GMT

Viewing: CE 252 : Environmental Quality Processes II

Formerly known as: CE 252B

Last edit: Thu, 17 Sep 2020 02:28:51 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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

Environmental Quality Processes II

Class Schedule Title:

Envr Quality Processes II

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 2021 (2021/2022 Catalog)

Subject Area: (prefix)

CE - Civil Engineering

Catalog Number: (course number)

252

Course ID: (For administrative use only.)

107636

Units:

3

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:

Graduate CE courses are being renumbered to clarify course topic areas to help students plan their path to graduation and be consistent with the undergraduate CE course numbers. Prerequisites numbers (not courses) are being changed to reflect course number changes that occurred in the undergraduate program in 2019-2020.

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

Theory and practice of biological processes for controlling water. Stoichiometry and kinetics of microbial growth. Aerobic and anaerobic metabolism. Engineered suspended and attached growth systems. Introduction to sludge treatment.

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 150, 150L, and 151. CE 251 recommended, or instructor permission.

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):

Seminar

Seminar Classification

CS#05 - Seminar (K-factor=1 WTU per unit)

Seminar 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 the important aspects of environmental microbiology in relation to their application in engineered treatment processes.
2. Explain how the biological phenomena common to treatment processes affect water quality.
3. Develop analytical techniques to model various biological processes in a treatment plant setting.
4. Apply various analytical methods to design treatment processes and predict their performance.
5. Review contemporary issues relating to biological aspects of environmental engineering.

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

CE252_syllabus.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.

Homework assignments (problems) (ELO 1-4)
 research paper (ELO 5)
 exams (ELO 1-4)

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

No

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?

Yes

Indicate which department(s) will be affected by the proposed course:**Department(s)**

Civil Engineering

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**Graduate (Masters) Learning Goals:**

Critical thinking/analysis
 Communication
 Disciplinary knowledge

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

Is this a Graduate Writing Intensive (GWI) course?

No

Key: 575