CE 275: GEOSYNTHETICS

In Workflow

- 1. CE Committee Chair (fogarty@csus.edu)
- 2. CE Chair (khan@csus.edu)
- 3. ECS College Committee Chair (mohammed.eltayeb@csus.edu)
- 4. ECS Dean (arad@csus.edu)
- 5. Academic Services (torsetj@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. Catalog Editor (torsetj@csus.edu)
- 10. Registrar's Office (wlindsey@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

- 1. Tue, 14 Sep 2021 18:32:29 GMT Julie Fogarty (fogarty): Approved for CE Committee Chair
- 2. Fri, 17 Sep 2021 22:42:50 GMT Ghazan Khan (khan): Approved for CE Chair
- 3. Fri, 24 Sep 2021 18:14:53 GMT

Mohammed Eltayeb (mohammed.eltayeb): Approved for ECS College Committee Chair

4. Tue, 28 Sep 2021 05:38:37 GMT Behnam Arad (arad): Approved for ECS Dean

Date Submitted: Mon, 13 Sep 2021 21:54:22 GMT **Viewing: CE 275 : Geosynthetics**

Formerly known as: CE 285

Last edit: Fri, 24 Sep 2021 18:14:30 GMT Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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

Geosynthetics

Class Schedule Title:

Geosynthetics

Academic Group: (College)

ECS - Engineering & Computer Science

Academic Organization: (Department)

Civil Engineering

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

Nο

Catalog Year Effective:

Fall 2022 (2022/2023 Catalog)

Subject Area: (prefix) CE - Civil Engineering

Catalog Number: (course number)

275

Course ID: (For administrative use only.)

107806

Units:

3

Is the primary purpose of this change to update the term typically offered or the enforcement of requisites at registration?

Nο

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

Fall term only - even years

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.)

Overview of geotextiles, geogrids and geonets; geosynthetic properties and test methods; geosynthetic functions and mechanisms as in separation, roadway and soil reinforcement, filtration, and drainage; applications and design methods; construction, fabrication and installation.

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)?

Νo

Does this course have prerequisites?

Yes

Prerequisite:

CE 170 and CE 170L or equivalent.

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?

Nο

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) Evaluate geotextiles for physical, mechanical, hydraulic, and endurance properties.
- 2) Design geotextiles for separation, filtration, drainage, and reinforcement.
- 3) Evaluate geogrids for physical, mechanical, and endurance properties.
- 4) Design geogrids for reinforcement.
- 5) Evaluate geonets for physical, mechanical, hydraulic, and endurance properties.
- 6) Design geonets for drainage.
- 7) Examine functions of geomembranes, geosynthetic clay liners, geofoam, geocomposites.
- 8) Design geosynthetic reinforced segmental retaining walls.
- 9) Specify geosynthetics construction methods.

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 (ELOs 1-9) Exams (ELOs 1-9)

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 Information literacy

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Disciplinary knowledge Professionalism

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?

Nσ

Please attach any additional files not requested above:

CE275 SyllabusV2.pdf

Key: 595