

CE 1: CIVIL ENGINEERING SEMINAR

In Workflow

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Approval Path

1. Sat, 12 Oct 2019 03:22:59 GMT
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Mon, 14 Oct 2019 18:01:25 GMT
Benjamin Fell (fellb): Approved for CE Chair
3. Fri, 25 Oct 2019 16:33:13 GMT
Troy Topping (troy.topping): Approved for ECS College Committee Chair
4. Fri, 25 Oct 2019 16:55:24 GMT
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Sat, 12 Oct 2019 03:05:50 GMT

Viewing: CE 1 : Civil Engineering Seminar

Formerly known as: CE 1A

Last edit: Sat, 12 Oct 2019 03:05:48 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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Catalog Title:

Civil Engineering Seminar

Class Schedule Title:

Civil Engineering Seminar

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)

1

Course ID: (For administrative use only.)

107076

Units:

1

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:

This course was approved for GE Area E in combination with CE 4 in 2018-2019 AY to comply with EO 1100. No content has changed. Only the number is changing for the reason below.

Undergraduate CE courses are being renumbered to clarify course pre- and co-requisites and topic areas to help students plan their path to graduation.

Classification changed to seminar as that is an accurate reflection of the course structure (and in the title of the course).

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

Introduces students to civil engineering as a profession. Topics include the technical disciplines (environmental, geotechnical, structural, transportation, and water resources), the role of civil engineers in planning, constructing and operating infrastructure, and professional responsibilities such as licensure and ethics. Case studies are used to explore both technical and nontechnical aspects of civil engineering projects such as design and environmental constraints, constructability, and social and political issues.

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?

No

Does this course have corequisites?

No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Lecture

Lecture Classification

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

Lecture Units

1

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. Identify and describe the disciplines and areas of practice within Civil Engineering
2. Describe the professional and ethical responsibilities of Civil Engineers
3. Demonstrate the ability to communicate effectively and understand the importance of effective communications in Civil Engineering practice
4. Describe the benefits and impacts of engineered infrastructure in a global, economic, environmental, and societal context
5. Recognize the need and skills required for engaging in life-long learning
6. Identify contemporary issues in Civil Engineering

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

CE Syllabus CE 1 (Area E).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.

Attendance, writing assignments (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
 Knowledge of human cultures and the physical and natural world
 Integrative learning
 Personal and social responsibility
 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?

Yes

In which GE area(s) does this apply?

E. Understanding Personal Development

Which GE objective(s) does this course satisfy?

Develop an acquaintance and understanding of cultures and major dynamic social institutions which affect one's life.

Find and use common information resources, engage in specialized library research, use computers and seek out appropriate expert opinion and advice.

Use mathematical ideas to accomplish a variety of tasks.

Gain a general understanding of current theory, concepts, knowledge, and scientific methods pertaining to the nature of the physical universe, ecosystems, and life on this planet.

Attach Course Syllabus with Detailed Outline of Weekly Topics:

CE Syllabus CE 4 (Area E).doc

CE Syllabus CE 1 (Area E).docx

Syllabi must include: GE area outcomes listed verbatim; catalog description of the course; prerequisites, if any; student learning objectives; assignments; texts; reading lists; materials; grading system; exams and other methods of evaluation.

Will more than one section of this course be offered?

Yes

Provide a description of what would be considered common to all sections and what might typically vary between sections:

There is one section of CE 1 taught each semester by the department chair and several sections of CE 4. The writing assignments will take place in CE 1 and will be consistent for all students.

Please write a statement indicating the means and methods for evaluating the extent to which the objectives of the GE Area(s) and any writing requirements are met for all course sections:

CE 1 and CE 4 must comply with criteria in ABET, the national accreditation board for U.S Engineering programs. ABET objectives for CE 1 and CE 4 parallel Area E objectives. Syllabi and student work showing if and how outcomes are being achieved are evaluated by the department and accrediting board periodically.

What steps does the department plan to take to ensure that instructors comply with the respective category criteria and who is responsible?

It is incumbent on the department to maintain accreditation status, so the department maintains conformity of CE 1 and CE 4 with accreditation guidelines which will simultaneously conform with Area E requirements. Conformity is ensured by the review or course content at the department Curriculum Committee level and enforced by the department chair in assigning instructors to courses.

General Education Details - Area E: Understanding Personal Development

Section 1.

Indicate in written statements how the course meets the following criteria. Relate the statements to the course syllabus and outline. Be as succinct as possible.

General criteria:

Demonstrates an understanding of academic content knowledge regarding self-development as a physiological, psychological, and social being.

The combination of courses (CE 1 and CE 4) meets external accreditation requirements (ABET) through providing students with an "understanding of professional practice issues", such as:

- 1) Self-development as a future civil engineer through discussions of professional licensing and continuing education, professional ethics, and/or how design and construction professionals interact to complete a project.
- 2) Role of civil engineers in developing physical infrastructure.

These are explicitly stated in the course objectives for both courses (all objectives for CE 1 and objectives 1 and 2 for CE 4).

Critically examines prior or current experiences or behaviors from their own lives in response to real world physiological, social and/or psychological contexts.

These courses re-frame, sensitize, and create a paradigm shift in students' perception of societal infrastructure. In these courses students re-examine their experiences with civil engineering infrastructure (and modern conveniences like fresh tap water) which are taken for granted. Exposes students to nontechnical aspects of civil engineering projects such as design and environmental constraints, constructibility, and social and political issues.

Applies skills and knowledge regarding development of the self to differing situations, such as real world challenges, an/or to make connections across perspectives

CE 4 students gain the ability to communicate with a variety of stakeholders through analyzing and developing graphical expressions for solutions to real-world engineering problems.

Specific criteria:

Students will be able to identify their own perspective and make connections/comparisons across perspectives

Through the case studies and discussion of ethics in CE 1, students are able to share and discuss their own and other perspectives. Students in CE 4 will be able to compare and address the differing perspectives of various stakeholders (architects, engineers, contractors, and public) when deciding how to use a graphical drawing to communicate information.

Students will be able to plan, monitor, and assess their own learning.

CE 1 and CE 4 has tentative course schedules with all assignments, quizzes, and exams listed. Students receive feedback on low-stakes assignments and quizzes to monitor and assess their own learning.

Students will be able to set personal and/or professional goals

CE 1 encourages students to plan their path through the curriculum, including looking at possible electives and to reflect on presentations from practicing engineers to form long-term professional goals.

Includes a writing component described on course syllabus

- 1) If course is lower division, formal and/or informal writing assignments encouraging students to think through course concepts using at least one of the following: periodic lab reports, exams which include essay questions, periodic formal writing assignments, periodic journals, reading logs, other. Writing in lower division courses need not be graded, but must, at a minimum, be evaluated for clarity and proper handling of terms, phrases, and concepts related to the course.
- 2) If course is upper division, a minimum of 1500 words of formal, graded writing. [Preferably there should be more than one formal writing assignment and each writing assignment (e.g. periodic lab reports, exams which include essay questions, a research/term paper etc.) should be due in stages throughout the semester to allow the writer to revise after receiving feedback from the instructor. Include an indication of how writing is to be evaluated and entered into course grade determination.]

CE1 periodic formal writing assignments as follows (1 page, single spaces for each assignment) -

- 1) Why are you interested in civil engineering? Describe your path to this major.
- 2) Ethics in civil engineering
- 3) Commonalities between the different areas in civil engineering
- 4) Non-technical skills in civil engineering

Section 2.

If you would like, you may provide further information that might help the G.E. Course Review Committee understand how this course meets these criteria and/or the G.E. Program Objectives found in the CSUS Policy Manual, General Education Program, Section I.B.

This course was approved for GE Area E in combination with CE 4 in 2018-2019 AY to comply with EO 1100. No content has changed. Only the number is changing for the reason above.

CE 1 is a seminar course all Civil Engineering students must take in their first semester (whether as a native freshman or transfer student). It is designed to introduce students to the field of civil engineering and explore the professional skills and development they will need to be successful in the profession.

CE 4 is a lower division required course for Civil Engineering majors that further introduces students to the the role of the design professional in the project development process. The purpose of this course is help students begin to view their surroundings as an engineer by interpreting and creating construction drawings, applying different measurement scales, and dimensioning components that make up a simple structure.

Please attach any additional files not requested above:

AreaE_CivilEngr_Resubmission.pdf

Key: 566