Fall 2020 Course Descriptions as of 04/05/2020 08:14 PM

Information in Browse Course Catalog is subject to change. Information is term specific. Please refer to the appropriate term when searching for course content. Key to Course Descriptions may be found at: **http://rcs.registrar.arizona.edu/course_descriptions_key**.

Sustainable Built Environments (SBE)

SBE 195A: Introduction to Sustainability (1 unit)
Description: This first-year colloquium will prepare students with insight into sustainable concepts and practices. Students will learn about sustainability and its impacts on the built environment from a national and global perspective.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Colloquium Required
Course typically offered:
Main Campus: Fall, Summer
Online Campus: Fall, Summer

SBE 195B: Careers in Sustainability (1 unit)
Description: This first-year colloquium will prepare Sustainable Built Environments and exploratory students with insight into careers in sustainability. Students will learn about the career paths offered by the degree program and practice professional skills required to obtain internships and jobs.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Colloquium Required
Course typically offered:
Main Campus: Spring, Summer
Online Campus: Spring, Summer

SBE 199: Independent Study (1 - 3 units)
Description: The Independent Study provides an opportunity for a deeper understanding in a specific area or topic. This syllabus is personalized to the student's interests and concerns, and thus is modifiable so as to create an exceptional learning experience.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 3 times.
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering
-CC represents a Correspondence Course offering
May Be Offered Departments may offer this component in some semesters. See the Schedule of Classes for term-specific offerings.

SBE 201: Sustainable Design and Planning (3 units)
Description: The focus of this course is on sustainable design and planning and is a framework for how we plan, build, and live in our built environments in a way that better balances environmental, social, and economic demands.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Course typically offered:
Main Campus: Fall, Summer
Online Campus: Fall, Summer

SBE 202: Professional Communication and Presentation (3 units)
Description: This course explores effective oral communication within the professions of the built environment with the intent of increasing student understanding of and competency in oral communication in preparation for entry into the world of practice.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Course typically offered:
Main Campus: Spring
Online Campus: Spring

Recommendations and additional information: Passing grade required for ENGL 101 and ENGL 102.COMM 119 recommended.

SBE 221: History of Built Environment I (3 units)
Description: The study of the history of the built environment provides a general understanding on how human societies have adapted the form of the built environment to their unique cultural, political, economic, climatic, and environmental challenges across time. This is the first of two courses which explores the history of the built environment through the lens of the six global climatic zones, providing an opportunity to explore the built environment across the world and throughout various cultures. This course provides an overview of the history of the built environment at the city, building, and landscape scales and covers the built environment in hot and arid climates, hot and humid climates, and cold and arid climates. Students will learn examples from the past to help inform solutions to the multiple and complex challenges that our built environment faces today and in the future.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Course typically offered:
Main Campus: Fall
Online Campus: Fall

SBE 222: History of the Built Environment II (3 units)
Description: The study of the history of the built environment provides a general understanding on how human societies have adapted the form of the built environment to their unique cultural, political, economic, and environmental challenges across time. This is the second course out of two courses and they are organized in modules that correspond to different climatic zones. These are:1. Hot and arid2. Hot and humid3. Cold and arid4. Cold and humid5. Temperate and arid6. Temperate and humidThis second course includes the last three climate zones (cold and humid, temperate and arid, and temperate and humid).
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Course typically offered:
Main Campus: Spring
Online Campus: Spring

SBE 299: Independent Study (1 - 3 units)
Description: The Independent Study provides an opportunity for a deeper understanding in a specific area or topic. This course is personalized to the student's interests and concerns, and thus is modifiable so as to create an exceptional learning experience.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 3 times.
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

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SBE 301: Introduction to Design Thinking (4 units)
Description: This course introduces students to the essential methods of visual communication and ordering systems through a series of interrelated exercises. Techniques such as investigative sketching, freehand drawing, and digital design communication are considered in relation to their potential to reveal the world around us with a heightened sense of awareness. Issues such as place, material, structure and enclosure will be explored empirically and conceptually at a variety of scales and applications. Importantly, this is a interdisciplinary based studio - students enrolled in this course will have the ability to engage in a variety of different design strategies.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Studio Required
Course typically offered:
Main Campus: Spring, Summer
Online Campus: Spring, Summer

Field trip: Individual field trips and visits to Main Library may be necessary.

SBE 393: Internship (3 - 4 units)
Description: The primary goal of the internship is to give students an opportunity to apply lessons learned in the classroom to a real-world experience set in a professional practice-oriented environment, with the intern's work overseen by a professional.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

Student Engagement Activity: Professional Development
Student Engagement Competency: Professionalism

SBE 399: Independent Study (1 - 3 units)
Description: The Independent Study provides an opportunity for a deeper understanding in a specific area or topic. This course is personalized to the student's interests and concerns, and thus is modifiable so as to create an exceptional learning experience.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 1 times.
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

SBE 450: Green Infrastructure (3 units)
Description: The goal of this course is the advancement of students' knowledge and capabilities regarding Green Infrastructure concepts and the issues and techniques involved in implementation of Green Infrastructure. The course provides an overview as well as more in-depth coverage of the science, practical context, and creation of Green Infrastructure. The built environment of arid regions is emphasized, with Tucson Case Studies providing practical focus to content and learning objectives. The term Green Infrastructure, as used in this course, aligns with the following EPA description: "Green infrastructure uses vegetation, soils, and natural processes to manage water and create healthier urban environments... at the scale of a neighborhood or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water." The course features lectures, interactive discussions and presentations, and guest presentations and tours led by experts in their fields. Students take a series of quizzes, a mid-term and a final exam, along with a number of homework assignments / exercises. A special research report is required of Graduate Students.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Also offered as: ENVS 450, LAR 450, PLG 450
Co-convened with:
Course typically offered:
Main Campus: Fall

Recommendations and additional information: Prior coursework in related fields is recommended along with familiarity with office productivity software tools (Excel & PowerPoint) along with research, analytic, and writing skills.
Field trip: A number of potential tours are proposed to allow students to engage with applied contexts and professionals in the field.
Home department: Environmental Science
Honors Course: Honors Contract
Honors Course: Honors Contract
Student Engagement Activity: Discovery
Student Engagement Competency: Sustainability

SBE 480: Research Methods (3 units)
Description: This course is all about answering questions and solving problems in urban environments. Students will get to choose what content to study during the course, i.e. transportation, the environment, social equity, etc. For undergraduate students, their topic can inform the development of a senior capstone in subsequent semesters. Graduate students can use the work from this class to advance their thesis or professional project work. This course will train students to quantitatively and qualitatively analyze real world data used in the planning and design of the built environment. Students will gain firsthand experience in the research process: forming research questions and figuring out how to best answer those research questions. Students will develop key skills including: identifying and analyzing data sources, building datasets, learning descriptive statistics, analyzing trends, and visualizing data. The course will culminate in students developing a proposal that they can use for their Senior Capstone.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Lecture Required
Co-convened with: SBE 580
Course typically offered:
Main Campus: Fall, Winter, Spring, Summer
Online Campus: Fall, Winter, Spring, Summer
Distance Campus: Fall, Winter, Spring, Summer

Field trip: None

SBE 493: Internship (3 - 4 units)
Description: The primary goal of the internship is to give students an opportunity to apply lessons learned in the classroom to a real-world experience set in a professional practice-oriented environment, with the intern's work overseen by a professional.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

SBE 498: Senior Capstone (3 - 4 units)
Description: The Senior Capstone is the culminating experience for Sustainable Built Environment majors involving a substantive project that demonstrates a synthesis of learning accumulated in the major, including broadly comprehensive knowledge of the discipline and its methodologies.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 2 times.
Course typically offered:
Main Campus: Fall, Spring
Online Campus: Fall, Spring

Student Engagement Activity: Discovery
Student Engagement Competency: Innovation and Creativity

SBE 498H: Honors Thesis (3 units)
Description: An honors thesis is required of all students graduating with honors. Students ordinarily sign up for this course as a two-semester sequence. The first semester the student performs research under the supervision of a faculty member; the second semester the student writes an honors thesis.
Grading basis: Regular Grades
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 2 times.
Course typically offered:
Main Campus: Fall, Spring
Online Campus: Fall, Spring

Enrollment requirement: Student must be active in the Honors College.
Honors Course: Honors Course
Honors Course: Honors Course
Student Engagement Activity: Discovery
Student Engagement Competency: Innovation and Creativity

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SBE 499: Independent Study (1 - 3 units)
Description: The Independent Study provides an opportunity for a deeper understanding in a specific area or topic. This course is personalized to the student's interests and concerns, and thus is modifiable so as to create an exceptional learning experience.
Grading basis: Alternative Grading: S, P, F
Career: Undergraduate
Course Components: Independent Study Required
Repeatable: Course can be repeated a maximum of 1 times.
Course typically offered:
Main Campus: Fall, Spring, Summer
Online Campus: Fall, Spring, Summer

SBE 550: Green Infrastructure (3 units)
Description: The goal of this course is the advancement of students' knowledge and capabilities regarding Green Infrastructure concepts and the issues and techniques involved in implementation of Green Infrastructure. The course provides an overview as well as more in-depth coverage of the science, practical context, and creation of Green Infrastructure. The built environment of arid regions is emphasized, with Tucson Case Studies providing practical focus to content and learning objectives. The term Green Infrastructure, as used in this course, aligns with the following EPA description: "Green infrastructure uses vegetation, soils, and natural processes to manage water and create healthier urban environments... at the scale of a neighborhood or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water." The course features lectures, interactive discussions and presentations, and guest presentations and tours led by experts in their fields. Students take a series of quizzes, a mid-term and a final exam, along with a number of homework assignments / exercises. A special research report is required of Graduate Students.
Grading basis: Regular Grades
Career: Graduate
Course Components: Lecture Required
Also offered as: ENVS 550, LAR 550, PLG 550
Co-convened with:
Course typically offered:
Main Campus: Fall

Field trip: A number of potential tours are proposed to allow students to engage with applied contexts and professionals in the field.
Home department: Soil, Water, & Environmental Sciences

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SBE 580: Research Methods (3 units)
Description: This course is all about answering questions and solving problems in urban environments. Students will get to choose what content to study during the course, i.e. transportation, the environment, social equity, etc. For undergraduate students, their topic can inform the development of a senior capstone in subsequent semesters. Graduate students can use the work from this class to advance their thesis or professional project work. This course will train students to quantitatively and qualitatively analyze real world data used in the planning and design of the built environment. Students will gain firsthand experience in the research process: forming research questions and figuring out how to best answer those research questions. Students will develop key skills including: identifying and analyzing data sources, building datasets, learning descriptive statistics, analyzing trends, and visualizing data. The course will culminate in students developing a proposal that they can use for their Senior Capstone.
Grading basis: Regular Grades
Career: Graduate
Course Components: Lecture Required
Co-convened with: SBE 480
Course typically offered:
Main Campus: Fall, Winter, Spring, Summer
Online Campus: Fall, Winter, Spring, Summer
Distance Campus: Fall, Winter, Spring, Summer

Field trip: None

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