GRADUATE COUNCIL: NEW COURSE PROPOSAL

Originating Unit:

Type of action: New course Full online course**

Semester and year course will take effect:

New course title:

Appropriate computer abbreviation (30 spaces or less):

Course instructional methodology:

course component types: ugradcouncil.tcu.edu/forms/Course Component Types.pdf

New course number:

Prerequisites for new course: include an attachment if additional space is needed

Description of new course (catalog copy): *include an attachment if additional space is needed*

Fully Online Courses**

All online courses, and /or distance learning offerings must meet State Compliance regulations as defined by specific state legislation. TCU Distance Learning is any for-credit instruction provided to a TCU student outside the State of Texas. This includes internships, clinical, video conferencing, online, or any other delivery format that crosses state lines. Contact the Koehler Center for Teaching Excellence for guidelines. Include a letter of support from the Koehler Center with this proposal.

Supporting evidence or justification: (For a new course, attach proposed syllabus, including course objectives, course outline, and representative bibliography.)

Describe the intended outcomes of the course and how they will be assessed: *include an attachment if additional space is needed*

	attached files can be seen and managed in Acrobat Pro by clicking on View > Show/Hide > Navigations Panes > Attachments
Additional resources required:	
Faculty:	
Space:	
Equipment:	
Library:	
Financial Aid:	
Other:	
Change in teaching load:	
Does this change affect any other unit	ts of the University? Yes No
If yes, submit supporting statement signed by	by chair of affected unit.

If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and the cross-listed units.

Chair of Originating Unit:

Name:

Unit:

Signature:

ENSC 60343 – Service Learning in Environmental Science and Sustainability

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	Semester: Spring 2024	Instructor: Brendan L. Lavy, PhD, Asst. Professor
	Time: F 9:00 am to 11:50 am	Office Hours: TBD or by appointment
100	Location: SWR 217	Office: SWR 221C Office Phone: (817) 257-7273
0	Class Nbr: ??? Section: ???	Email: <u>b.lavy@tcu.edu</u> Response Time: within 24 hrs

Spring 2024

COURSE CATALOG DESCRIPTION: This course engages students in hands-on, community-based projects in the environmental and sustainability sciences. Students will collaborate with a community group to design, implement, and assess sustainable solutions to environmental challenges, fostering an understanding of environmental principles and community engagement. Through real-world applications, students will cultivate essential skills and knowledge to become proactive stewards of our planet.

LEARNING OBJECTIVES AND OUTCOMES: This course is designed to provide students with real-world experience in the environmental and sustainability sciences and emphasizes community partnerships through service learning. The course content focuses on developing and implementing an effective research design, applications, and report writing. Guided by the instructor and community collaborator, students will develop and implement a plan for the collection, measurement, and analysis of data to address the collaborator's goals. This semester, students will work with the Botanical Research Institute of Texas (BRIT) to measure and calculate the ecosystem services of trees at the Fort Worth Botanic Garden. The primary deliverable for the course is a professional report that communicates the ecosystem services of the garden's trees.

After completing this course, students should be able to:

- 1. Use tools and methods for measuring trees and evaluating their health and status within the botanic garden;
- 2. Understand and apply principles of ecosystem services to quantify the environmental and economic benefits provided by the trees within the garden;
- 3. Synthesize data and findings into a comprehensive, clear, and well-organized report that effectively communicates the significance and implications of the final analyses;
- 4. Cultivate effective communication and presentation skills tailored to engage and inform audiences about the value and importance of the garden trees; and
- 5. Foster collaborative work ethics by engaging in team-based activities, sharing responsibilities, and ensuring feedback integration from peers and professionals.

READING: The instructor assigns readings based on the service-learning goals and selected methods of analysis. Readings will be shared with the students via email and may include journal articles, book chapters, government reports, and popular press coverage of current events related to the research topic.

MAPPING OF COURSE OUTCOMES, COURSE ACTIVITIES AND ASSIGNMENTS, AND GRADE POINTS:

Course Outcomes	Course Activities and Assignments	Points
1,2,3,4,5	Weekly participation	25
1,2,3,4,5	Field notebook and weekly reflections	25
1,2,3,4,5	Service-learning deliverables	35
1,2,3	Final exam	15

GRADE CALCULATION:

Letter Grade	Score
А	100-90
В	89-80
С	79-70
F	69 or <

FINAL EXAM INFORMATION: The final exam date for this course is XXXX from XXXX to XXXX. Rescheduling of Finals Policy: According to the <u>Faculty/Staff Handbook "Rescheduling of Finals</u>," rescheduling a final arrangement must be made one week prior to the last day of classes. Rescheduling of final examinations is permitted 1) for meeting the 24-hour rule or 2) for graduating seniors whose faculty members must submit final grades by Wednesday 5 pm of finals week. Unless the student is graduating, the exam must be taken during final examination week.

LATE WORK: All assignments are due in your assignment folder on TCU Online at 5:00 pm on their respective due dates. All late assignments will lose 2 points per day for every day they are late past the posted due date (unless stated otherwise).

ATTENDANCE: Students are expected to attend all scheduled classes. Your attendance is important to your overall success in this course. Attendance at each class session is assumed, and roll will be taken each class session. The roll sheet is "closed" once the instructor leaves class on any given day. If you come in late, it is your responsibility to sign the roll at the end of class, and the instructor reserves the right to count you absent for those days. Your first absence will not impact your grade, but every absence thereafter will result in a 5-point deduction from your final grade.

OFFICIAL (EXCUSED) ABSENCES: The attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the official absence and arrange to make up missed work or examinations. The attendance policy also excuses students from attending class if they have a medical appointment, a one-time job requirement, or a family emergency. For an absence to be excused, the student must provide documentation.

MAKE-UP EXAM POLICY: In the case of an excused absence, permission to make up a missed exam requires a student to make an official request to the instructor and support the request with proper documentation. If granted, make-up exams must be taken within one week after the official exam date.

OTHER COURSE POLICIES AND INFORMATION: The following policies are intended to create a good learning environment for all students, while maintaining a high standard of fairness and academic performance.

- **Transportation:** A university vehicle will be available for transportation to the service-learning location. Students may also use their own vehicles. Departure time is 8:45 am on class days.
- Being on time/leaving class early: Make every effort to be in class on time and plan to stay for the entire period. If you arrive late, please take your seat without disrupting your peers. If a schedule conflict requires you to leave class early, notify the instructor prior to the beginning of class that day. If you do not, you will be counted as absent for the entire class period.
- **Digital/communication equipment:** All phones (smart or otherwise) MUST be turned off during class. Absolutely NO texting during class. The instructor reserves the right to ask you to leave class immediately if you text (or are suspected of texting) during class. No video recording, audio recording, or photography is allowed in class, unless indicated by SAA and approved by the instructor. Laptops are allowed but are to be used for taking notes only. If you use a laptop, the instructor reserves the right to assign your seat to avoid classroom distractions.
- Declaration of generative AI in writing: The instructor recognizes that there are a variety of generative AI and AI-assisted technologies available to assist writers. Generative AI and AI-assisted technologies are not a replacement for human creativity, originality, and critical thinking. Writing is a craft that students must hone over time to develop their own individual voices as writers. Within limited circumstances, and with proper attribution, AI programs may be used as a tool. If used, students must disclose the use of generative AI and AI-assisted technologies in the writing process by adding a statement at the end of their assignments. The statement should be placed in a new section entitled "Declaration of Generative AI and AI assisted technologies in the writing process."

Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

This declaration does not apply to the use of basic tools for checking grammar, spelling, references, etc. If there is nothing to disclose, there is no need to add a statement.

Class Norms & Netiquette: All members of the class are expected to follow rules of common courtesy in all email messages, discussions, and chats. If I deem any of them to be inappropriate or offensive, I will forward the message to the Chair of the department and appropriate action will be taken, not excluding expulsion from the course. The same rules apply online as they do in person. Be respectful of other students. Foul discourse will not be tolerated. Please take a moment and read some <u>basic information about netiquette (http://www.albion.com/netiquette/</u>).

Participating in the virtual realm, including social media sites and shared-access sites sometimes used for educational collaborations, should be done with honor and integrity. Please <u>review TCU's guidelines on electronic communications</u> (email, text messages, social networks, etc.) from the Student Handbook. (<u>https://tcu.codes/policies/network-and-computing-policy/e-mail-electronic-communications-social-networks/</u>)

TCU SYLLABUS POLICIES & RESOURCES

Please use this <u>link</u> or scan the QR code with a mobile device camera to access policies and resources including support for TCU students, student access and accommodation, anti-discrimination and Title IX information, and other important information.



ASSIGNMENTS: All assignments must be completed on your own on (or uploaded to) TCU Online on their respective due dates. Late assignments will be penalized as outlined above unless otherwise noted.

ENTHUSIASM AND CAMARADERIE (AKA WEEKLY PARTICIPATION) (25 PTS.)

Students will undertake a service-learning project that meets the course description. As such, students will spend a considerable amount of time with the selected community partner. Students are required to bring their "best-professional-self" to the classroom and community partner site at all times. Students are also required to complete assigned readings in a timely fashion, prepare intriguing questions to prompt robust class discussions, and share their thoughts equally among peers. Points will be assigned at the instructor's discretion and based on a rubric posted to TCU Online.

Students are expected to:

- Participate in the development of the service-learning project. The specifics detailing the project goals and commitments will be attached to this syllabus.
- Participate in weekly or bi-weekly project meetings.
- Complete reading assignments (e.g., books, book chapters, and scientific articles) on time.
- Provide timely feedback on the progress of service-learning project. This should be done during the regularly scheduled class meetings.
- Inform the instructor when assistance is needed. This should be done during the regularly class meetings.

FIELD NOTEBOOK AND WEEKLY REFLECTION (25 PTS.)

Students will complete a field notebook that provides essential details of the service-learning project and their time at the field site. The field notebook will provide students with an opportunity to record their observations, measurements, sketches, and activities while in the field. Students will also be required to keep a journal within their field notebooks relative to the project. Weekly journal entries are part of the reflective process of becoming involved on an environmental science and sustainability project with the community partner. Reflection assignments will receive a grade based on creativity, effort, thought, and individual progress. The journal is a place for reflection, emotional response, observation, thought, and concern. Of particular interest, is the learning and personal discovery that takes place in the context of community service, how this relates to environmental science and sustainability, to you, and to society. Points will be assigned based on a rubric posted to TCU Online.

SERVICE-LEARNING PROJECT AND DELIVERABLES (35 PTS.)

Students will complete a service-learning project through collaborative work with a local community partner and guided by the instructor. Work on this project forms the basis of this course and will aid in your professionalization, help you build your professional network, and augment the efforts of the community partner to maintain and promote conservation and community outreach in the greater Fort Worth area. The class will devise a strategy based on best practices in environmental science and sustainability to optimally collect, analyze, and present data of interest to the community partner. The instructor worked with staff from the community partner to identify and propose the service-learning project based on the partner's needs. Staff from the community partner will meet with the class throughout the semester, and the class will conduct original research and generate a professional report in support of the partner's activities.

Project for Spring 2023: Urban Forest Benefits and Values (Community Partner: Botanical Research Institute of Texas (BRIT))

Problem:	Many cities are experiencing a decline in green spaces due to increased urbanization, leading to environmental and social challenges. Understanding the benefits and values of urban forests is essential to promote sustainable urban development. The Botanical Research Institute of Texas (BRIT) seeks to explore and highlight the critical roles of its urban forest in enhancing biodiversity, improving air quality, and fostering community well-being. However, there is a pressing need to increase public awareness and encourage community participation in preserving and expanding urban forests, ensuring that their benefits accrue to current and future generations.
Objective:	Develop and write a report that highlights the ecosystem services of trees under BRIT's care at the Fort Worth Botanic Gardens.
Context:	1) The report should seek to leverage existing BRIT data, services, and infrastructure 2) The report should integrate efficiently with current BRIT policies and regulations

Deliverables: 1) Written report, presented in a professional format, with best-practices/research-literature review, methods, figures and tables, and final recommendations (20 pts.)

2) 20-minute PowerPoint (or other visual format) presentation to BRIT staff at the end of the semester (10 pts.)

3) Annotated bibliography of literature cited as reference material (5 pts.)

NOTE: Points for deliverables, including the final presentation, will be assigned based on rubrics posted to TCU Online.

COURSE CALENDAR (subject to change with notice):

Week	Торіс
1	Introduction and expectations
2	Field notebooks and site visit
3	Report writing essentials
4	Field work
5	Field work
6	Field work
7	Field work
8	Field work
9	Spring Break
10	Field work
11	Field work
12	Data analysis and additional field work as necessary
13	Data analysis and additional field work as necessary
14	Data analysis, reporting requirements, and additional field work as necessary
15	Data analysis, reporting requirements, and additional field work as necessary
16	Field notebook and any other field data due