



Fall 2026
Special Problems BIOL4900.755
1-3 credit hours
Ecological Action Studio
Dr. Jaime Baxter-Slye
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ENV 332 office hours

When: By appointment

Where: ENV 332 and on-site.

Applied field course for current natural resource management projects in the Dallas-Fort Worth Metroplex. Scope of projects include municipal blue-green infrastructure development, public open space planning, habitat management planning, water storage and retention pond rejuvenation, stormwater management, park interpretation and assessment, native plant growing and installation best practices, environmental inventory, flora and fauna identification, economic benefit analysis, community engagement, professional report and presentation development, & stakeholder engagement.

Learning objectives

1. Conduct habitat resource inventories at municipal sites and management
2. Learn traditional and experimental restoration techniques
3. Understand blue-green infrastructure use and municipal benefit
4. Design municipal reduced mowing areas
5. Generate effective community engagement material for municipal use
6. Prepare professional grade reports
7. Deliver professional presentations to stakeholders
8. Work with stakeholders to develop and design projects for future real-world implementation.

Each mode of assessment will have a detailed rubric that will encompass writing proficiency, literature review, method development, spatial analysis and maps, data analysis, environmental inventory metrics, discussion points, and recommendations towards best practices for municipal or entity use.

- **100 pts Due by week of August 31st – proposal of semester project, with:**
 - Background, literature review
 - questions & objectives
 - timeline
 - budget
 - protocols
 - big picture of why this project matters and who are the stakeholders that will use it
- **20 pts at 13 weekly update scheduled meetings**
- **100 pts Participation and data collection.** 1 hr credit = 3 hrs per week x 14 weeks; 3 hrs credit x 14 weeks. Weekly time spent on projects with what you did needs reported in the discussion in CANVAS.
- **100 pts draft report geared towards stakeholders due week of November 23rd and includes:**
 - slide deck that can be turned into a pdf

- background, literature
- question and objectives
- timeline
- maps
- protocols
- data
- conclusions
- deliverables such as signage, social media templates
- **100 pts final project report and delivery to stakeholders in pdf form**
- **100 pts final presentation of report in slide deck form**

Supplies needed: field clothes, presentation clothes, laptop, field journal, camera &/or phone camera, water container, access to UNT ArcGIS, Microsoft OneDrive, Microsoft Word, Microsoft Excel, CANVA, iNaturalist, Google Earth, and UNT CANVAS

Project structure: each project will be co-led by a DFW professional and consist of a real-world applied natural resource management scenario.

Each project may include:

- 1) background material, terminology, and protocols
- 2) meetings with professionals &/or project team
- 3) literature review
- 4) project design/experimental design
- 5) site assessment and data collection
- 6) on-site video or documentation
- 7) data analysis
- 8) professional report
- 9) professional presentation via poster or slide deck
- 10) community engagement media (examples: story map, website material, signage, or other educational material for online/in person sharing)
- 11) on-site professional presentation (example: City Council, City Committee, Parks Board)
- 12) participation for each week

Every student enrolled will attain all material and site experience. Each student is responsible for understanding project scope, project development, and data collection. Each student will provide a literature review for each project. Each student will be graded on individual data collection and participation.

Fall 2026 projects include:

- 1) Habitat restoration at Bachman Lake – Lily Olivarez
- 2) Impact of burns and questions at Fort Worth Nature Center – Jen Wood
- 3) Analysis of plant rescue, soil retention, with educational outreach development for Cole Ranch – Madalyn Chandler and Carson Krajca

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access](https://studentaffairs.unt.edu/office-disability-access) website (<https://studentaffairs.unt.edu/office-disability-access>). You may also contact ODA by phone at (940) 565-4323.

This special problems course has one required meeting per week with the other hours to be completed independently.