



Spring 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: M 1 – 2 pm in-person or zoom meeting and all other hours to be completed virtually or on-site

Where: ENV 332 and on-site. Transportation will be provided.

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.

Spider spreadsheet and an Insect spreadsheet – 100 pts one spreadsheet, two tabs, formatted Arial 12 pt font, white fill, bold headers, in phylogenetic order, and then by Mak's plot number
iNat voucher collection – 100 pts for each taxa, at least 2 inat observations with high quality microscope

One draft group professional report (spider one and insect one) – 100 pts

One final group professional report – 100 pts

One presentation for public outreach – 100 pts

Participation and data collection = 100 pts - 1 hr credit = 3 hrs per week x 14 weeks; 3 hrs credit x 14 weeks

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 will 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
- 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 lab & field day

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.

Spring 2026 projects include:

- 1) Spider diversity at the Pollinative Prairie
- 2) Insect diversity at the Pollinative Prairie

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 online.