Welcome to Ecology Laboratory!

BIOL 2141.501 or .502

Lab Supervisor:
Dr. Jaime Baxter-Slye (she/her)
slye@unt.edu
ENV 332

office hours: W 2:00 – 4:00 PM, or email for appointment (virtual or in-person)

Black-tailed Jackrabbit
(Animalia: Mammalia: Lagomorpha: Lepus californicus)
Denton Co. Texas – photo by JL Baxter-Slye
What are the objectives of BIOL 2141?

- Introduce students to general ecological concepts, methods, instruments, and equipment for applied field-based investigations of the biotic and abiotic components of various ecosystems.
  - Experimental design
  - Field notebook techniques
  - Data collection
  - Data processing
  - Data analysis
  - Individual report writing and group presentation
d. **What are the objectives of this laboratory?**

- i. Develop observational skills
- ii. Learn about habitat types in north central Texas
- iii. Learn what environmental and ecological questions are unique to each ecosystem such as ecological services, anthropogenic impacts, conservation, and restoration
- iv. Learn assessment, report, and presentation skills, including but not limited to:
  1. Point Quarter Tree Assessment or Tree Database Generation with Forest Ecology and State of the World’s Forests
  3. Terrestrial Invertebrate Sweep Netting Assessment with Trophic Relationships with State of the World’s Invertebrate Populations
  4. Texas Commission on Environmental Quality Modified Aquatic Habitat Assessment with Rapid Bioassessment of Benthic Macroinvertebrates with Water Quality
  5. Modified Christmas Bird Count and State of North American Birds
  6. Develop observational skills
  7. Develop field note taking skills and observation database generation
  8. Learn basic “Good Laboratory Practices (GLP)”
  9. Learn how to create a taxonomic database and generate taxonomic tables
  10. Learn how to research information for introductions and discussions
  11. Be able to calculate basic taxonomic metrics
  12. Discover how to report taxonomic data and taxonomic hierarchy
  13. Be able to generate a high-quality, professional scientific report based on field trip data collection
  14. Give a scientific presentation, either a poster or slideshow that is “conference-style”
The Basics

- BIOL 2141 prerequisites include 1710/1720/1730/1740/1760 - The two freshman semesters of Biology.

- The Ecology Lecture (BIOL2140) may be taken previously or concurrently. The lab and the lecture courses are entirely separate and are not meant to correspond with one another meaning they may not be discussing the same topics.

- This course is in-person for the duration of the semester.

- We will provide materials in CANVAS in modules for each week.

- Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UNT IT Help Desk
Email: helpdesk@unt.edu
Live Chat: https://it.unt.edu/helpdesk/chatsupport
Phone: 940-565-2324
In Person: Sage Hall, Room 330
Hours and Availability: Visit https://it.unt.edu/helpdesk for up-to-date hours and availability

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)
c. What materials do I need for this lab?

- Pigma pen or pencil (a writing instrument that will not bleed if water or ethanol gets on the paper)
- Small ruler
- Sunblock
- Boots or sturdy protective closed-toed footwear that can withstand mud and water
- Long pants that can withstand briar and kneeling on the ground
- Hat for sun or cold
- Outer layers for cold
- Antihistamines may be brought if you are susceptible to poison ivy, allergies, or even if you need an epipen. (Note, if you are allergic to bees or fire ants, please bring your epipen; alert the TA that you are allergic and what happens to you should you be stung).
- Field backpack for carrying field gear, the lab manual, and supplies while on a trip
- Insect repellent (we will provide “OFF”)
- Water bottle
- Field trip snacks

- Access to the iNaturalist and Discord applications, preferably both on a phone and desktop. (We use Discord for fast communication and ease of posting articles, documents, photos, etc. The Discord link is found on CANVAS.)
- Microsoft Word, Excel, and PowerPoint. Visit https://it.unt.edu/helpdesk if you need this software.
- University of North Texas (UNT) Email and CANVAS
- UNT provided OneDrive (can be accessed via EagleConnect in the top left corner; see TA demonstration). Groups may opt to use GoogleDocs instead of OneDrive if they agree.
- An eagerness, willingness, and desire to learn field methods, report writing, and group participation that is needed for essentially any ecology-related career.
How will my grade be calculated – please note changes. These points will be used and differ from the manual.

<table>
<thead>
<tr>
<th>Item</th>
<th>Times this semester</th>
<th>Points for each time</th>
<th>Total for this semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce yourself discussion; Discord sign up; iNaturalist sign up</td>
<td>Once due by the second week of lab</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Lab and field trip attendance with participation</td>
<td>12</td>
<td>20</td>
<td>240</td>
</tr>
<tr>
<td>Field Journal Entry and data upload</td>
<td>Five Entry 25 data upload 10</td>
<td></td>
<td>175</td>
</tr>
<tr>
<td>Journal Article Discussion</td>
<td>Once</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Taxonomic Scavenger Hunt with Report, including abiotic and biotic</td>
<td>Once</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Group Planning Document</td>
<td>Once</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Group Project: Individual Introduction and Materials and Methods</td>
<td>Once</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Group Project: Results</td>
<td>Once</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Group Project: Final Report</td>
<td>Once</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Group Project Presentation</td>
<td>Once, due the last day of lab</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Group Participation</td>
<td>Once, due the last day of lab</td>
<td>20. With the possibility of receiving a lower grade on the final group report planning, report, and presentation in cases where there is zero, or a considerable lack of group participation.</td>
<td>20</td>
</tr>
</tbody>
</table>

Total: 985
<table>
<thead>
<tr>
<th>Date</th>
<th>What is due?</th>
<th>What we will be doing?</th>
</tr>
</thead>
</table>
| 1/20 | • Buy the manual  
• Obtain supplies  
• Pre-test | • Pre-test, Ch. 1 - Intro, syllabus, safety  
• Ch. 2 – Scientific report and presentation guidelines (introduce chapter, look at previous reports, download iNat, create iNat handle, and make your first observation) |
| 1/27 | • Introduce yourself on Discord and Complete Syllabus Agreement  
• Make an iNat account; make your first observation  
• Fill out CANVAS discussion regarding group info  
• Join UNT SER if you want to | • More on Ch. 2 – take another in-depth look  
• Ch. 3 – Introduction to taxonomy, taxa scavenger hunt  
• Intro to peer-reviewed journal articles |
| 2/3  | • Complete journal article discussion. Answer one of your peers questions and ask two questions. | • Ch. 3 – Introduction to taxonomy, taxa scavenger hunt  
Go outside and make observations |
| 2/10 | • Nothing due. Keep making iNat observations | • Brief intro to field trip protocols  
• Go outside and make observations |
| 2/17 | • Make sure everything above is complete; nothing new due  
• Keep working on TSH iNat observations; begin writing the report | • Ch. 4 – Ecosystem services and the tree assessment and surveys: Field Trip to Blackjack Trail at LLELA |
| 2/24 | • Taxa Scavenger Hunt due on CANVAS by 11:59 PM  
• Tree field trip data discussion due by 11:59 pm. One group member upload data sheets into the discussion. | • Ch. 7 – Avian taxa in prairie habitats with a "modified Christmas bird count" assessment and trophic relationships: Field trip to the UNT Pollinative Prairie. |
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<tr>
<td>3/3</td>
<td>Tree and Avian field journal due by 11:59 pm. Take pictures of field worksheets from the manual and paste them into a single word document. Upload in CANVAS in the 'Field Journal' module.</td>
<td>Ch. 6 – Aquatic assessment with benthic macroinvertebrate community structure: Field trip to dam outfall at LLELA rescheduled.</td>
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<td></td>
<td>Avian field trip data discussion due by 11:59pm. One group member upload data sheets into the discussion.</td>
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<tr>
<td>3/10</td>
<td>Aquatic field trip data discussion due by 11:59 pm. One group member upload the data sheets into the discussion</td>
<td>Ch. 5 – Prairie restoration and percent coverage plant assessment: Field Trip to Barn Owl Ridge at LLELA.</td>
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<td></td>
<td>Aquatic field journal due by 11:59 pm. Take pictures of field worksheets from the manual and paste them into a single word document. Upload in CANVAS in the 'Field Journal' module.</td>
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<tr>
<td>3/24</td>
<td>Prairie Plant field trip data discussion due by 11:59pm. One group member upload data sheets into the discussion.</td>
<td>Terrestrial invertebrate sweep net assessment at the Pollinative Prairie. (Note: this lab is not in the manual)</td>
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<tr>
<td></td>
<td>Prairie Plant field journal due by 11:59 pm. Take pictures of field worksheets from the manual and paste them into a single word document. Upload in CANVAS in the 'Field Journal' module.</td>
<td></td>
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</tbody>
</table>
| 3/31 | • Terrestrial Invertebrate field trip data discussion due by 11:59pm. One group member upload data sheets.  
  • Terrestrial field journal due by 11:59 pm. Take pictures of field worksheets from the manual and paste them into a single word document. Upload in CANVAS in the 'Field Journal' module.  
  • Group planning document due by 11:59 pm. Upload in CANVAS in the Group Project module. | • Inclement weather day - we may go on a field trip if one above was cancelled.  
  • Bring your laptop if you have one.  
  • Group lab meeting in ENV 243: discuss individual introduction, materials and methods portion of the report. Groups will work on group planning document. |
| 4/7  | • Individual Introductions Materials and Methods due by 11:59pm. | • Bring your laptop if you have one.  
  • Group lab meeting in ENV 243; discuss results section |
| 4/14 | • Group results due by 11:59 pm. One member from each group upload the results on CANVAS under ‘Group Report’ module. Title page, TOC, results, and references only. | • Bring your laptop if you have one.  
  • Group lab meeting in ENV 243: discuss feedback from individual intros, groups work on consolidating all members intros into final report. Work on results and slideshow. |
| 4/21 | • Nothing due. Work on your final report and presentation with your group. | • Bring your laptop if you have one.  
  • Group lab meeting in ENV 243: discuss results feedback, groups work on generating final report. Work on slideshow. |
| 4/28 | • Final presentation is due by 8am prior to symposium.  
  • Final report is due by 11:59 pm.  
  • Post-test  
  • Peer-review evaluations due by Sunday 12/4 at 11:59 pm. Upload in CANVAS under ‘Group Report’ module. | • Semi-annual Ecology Laboratory Symposium |
Attendance Policy

• In Ecology Lab, there are 240 points possible for attendance and participation.

• If a University excused absence occurs, students should immediately make arrangements with their TA to make up the lab before the end of the week or make other arrangements if that is not possible.

• We ask that if you miss lab, you contact your group and your TA ASAP so that we can work together to get caught back up.
• Welcome to UNT!
  – As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation. UNT’s full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.

• In addition, sometimes in Ecology Laboratory we may not agree on certain issues. However, we must refrain from using insulting, degrading, disrespectful, or offensive terms and language when discussing topics or ideas either in-person, in written assignments, or in my group work settings. This includes time outside of lab while working with your group. Failure to do so may result in a point deduction due to lack of effective participation.
Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

• While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.

• Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.

• Ask for and use the correct name and pronouns for your instructor and classmates.

• Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual’s experiences.

• Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.

• Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”

• Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.

• Avoid using “text-talk” unless explicitly permitted by your instructor.

• Proofread and fact-check your sources.

• Keep in mind that online posts can be permanent, so think first before you type.

• See these Engagement Guidelines (https://clear.unt.edu/online-communication-tips) for more information.
BIOL 2141 labs have a zero-tolerance policy for scholastic dishonesty including:

Students who are found to have committed scholastic dishonesty in any form, including but not limited to:

- copying from another student’s report writing,
- copying field journal entries,
- uploading pictures on iNat that you did not take, or
- allowing another student to copy from your report writing or field journal entries, or any other form of plagiarism
- groups plagiarizing previous semester projects or literature from sources (not citing)

will be given a reduction in points, a zero for the assignment, and/or be reported to the Dean of Students.

The term ‘plagiarism’ includes, but is not limited to:

- the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment;
- the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Examples: copying word for word or even a phrase from a publication, including web pages, without placing quotes around the phrase and citing the source.

- If we suspect you of cheating, an email will be sent to you to begin an investigation into the event which will lead to penalties.
How can discuss my grades with my TA?

The Family Educational Rights and Privacy Act (FERPA) (1974), does not permit faculty or staff to report grades by phone or email. In addition, per University policy, grades cannot be posted publicly. Do not request any information from your TA about grades unless it is via Zoom or in-person.
The University of North Texas makes reasonable academic accommodations 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 website at https://studentaffairs.unt.edu/office-disability-access. You may also contact ODA by phone at (940) 565-4323.
Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. [Insert specific sanction or academic penalty for specific academic integrity violation.]

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one’s specific course needs. Students may request accommodations at any time, however, ODA notices of 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 accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website (https://disability.unt.edu/).

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student’s records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University’s policy. See UNT Policy 10.10, Records Management and Retention for additional information.
Acceptable Student Behavior
Student behavior that interferes with an instructor’s ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student’s conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT’s Code of Student Conduct (https://deanofstudents.unt.edu/conduct) to learn more.

Access to Information - Eagle Connect
Students’ access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student’s Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail Eagle Connect (https://it.unt.edu/eagleconnect).

Student Evaluation Administration Dates
Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website (http://spot.unt.edu/) or email spot@unt.edu.

Survivor Advocacy
UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-5652648.
Additional UNT Services

Academic Support & Student Services

Student Support Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- UNT Records
- UNT ID Card
- UNT Email Address
- Legal Name

*UNT euIDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.*
**Pronouns**

- Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don’t assume someone’s name, we should also ask and not assume someone’s pronouns.

- You can [add your pronouns to your Canvas account](#) so that they follow your name when posting to discussion boards, submitting assignments, etc.

- Below is a list of additional resources regarding pronouns and their usage:
  - What are pronouns and why are they important?
  - How do I use pronouns?
  - How do I share my pronouns?
  - How do I ask for another person’s pronouns?
  - How do I correct myself or others when the wrong pronoun is used?