

VANESSA MARTINEZ

Department of Agriculture, Ag Business, and Environmental Sciences

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EDUCATION

Master of Science | University of Tennessee Institute of Agriculture | Knoxville, TN | *Aug. 2023 – May 2026*

Thesis: “Optimizing Organic Corn Production Under Different Living Mulch Systems”

Bachelor of Science, Animal Science | Texas A&M University | College Station, TX | *2011 – 2015*

Minor: Business Administration

GRADUATE TEACHING & RESEARCH EXPERIENCE

Graduate Teaching Assistant | University of Tennessee – Department of Plant Sciences | Knoxville, TN |

Aug. 2023 – May 2026

- Assisted Dr. Andy Pulte in undergraduate plant sciences courses from Fall 2023 through Spring 2026.
- Supported course delivery, student communication, assessment, grading, guest lecturers, course materials, and examinations.
- Conducted forage research under Dr. Renata Oakes for a thesis investigating how different living mulch species influence corn yield, fertilization needs, weed suppression, and soil health.

UNIVERSITY COURSES & INSTRUCTIONAL EXPERIENCE

PLSC 115: Plants that Changed the World | University of Tennessee | Knoxville, TN | *Fall 2023, Fall 2024, Fall 2025*

- Section 001: Attended in-person classes, developed exam questions, supported guest lecturers, maintained communication with students, and graded assignments.
- Presented modules on Coffee in Fall 2023 and Bananas in Fall 2024 and Fall 2025.
- Section 002: Maintained the Canvas course page, created and uploaded class materials, communicated with students, and coordinated with professors to record lectures.
- Presented three modules in Fall 2025: Plant Explorers, Coffee, and Bananas.

PLSC 320: Landscape Plant ID/Taxonomy/Morphology I | University of Tennessee | Knoxville, TN | *Fall 2024, Fall 2025*

- Attended in-person classes, assisted with exam proctoring, and co-managed Dr. Pulte’s Plant Sleuth Instagram account with fellow teaching assistants.

PLSC 321: Landscape Plant ID/Taxonomy/Morphology II | University of Tennessee | Knoxville, TN | *Spring 2024, Spring 2025, Spring 2026*

- Created quizzes, updated landscape tips, graded assignments, posted course materials to Dr. Pulte’s class Instagram page, and collected plant cuttings for reviews and examinations.

K-12 TEACHING EXPERIENCE

5th Grade Reading Teacher | Cedar Bluff Elementary / Northshore Elementary School | Knoxville, TN | *2022 – 2023*

- Created a safe and positive learning environment while managing student behavior and emotions.
- Planned and implemented Benchmark Advance reading lessons.
- Led the Cedar Bluff Elementary Leadership Team of 30 students.
- Served as a substitute teacher at Northshore Elementary for a teacher on maternity leave.

6th Grade Science Teacher | Cedar Bluff Middle School | Knoxville, TN | *Fall 2020*

- Designed and implemented lessons aligned with Tennessee Academic Standards.
- Taught both in-person and virtual classes and collaborated with the sixth-grade team to assess student needs.

6th Grade Science Teacher | Jane Long Intermediate School | Bryan, TX | *Aug. 2018 – Nov. 2019*

- Developed students' science knowledge while supporting their social-emotional growth.
- Collaborated with the sixth-grade team to create weekly lesson plans incorporating objectives, instructional strategies, vocabulary, accommodations, reteaching, and extension activities.
- Analyzed student data and adjusted teaching strategies as needed.
- Participated in school and community activities to strengthen relationships with students and families.

PUBLICATIONS

Pedreira, B., V. Martinez, M. Fancher, D. McIntosh, 2026. "Forage Explorers" University of Tennessee Extension Publication W1402. [LINK](#)

RESEARCH

Thesis Research: Optimizing Organic Corn Production Under Different Living Mulch Systems

- Forage research conducted under the direction of Dr. Renata Oakes.
- Investigated the effects of living mulch species on corn yield, fertilization needs, weed suppression, and soil health.

PRESENTATIONS & SERVICE

Presenter | 2024 Tennessee 4-H Academic Conference | Tennessee | *2024*

- Presented on Forages and led a group activity with a fellow graduate student.

PROFESSIONAL ORGANIZATIONS

Gamma Sigma Delta Honors Society of Agriculture – University of Tennessee | *Fall 2023 – May 2026*

- Graduate Student Liaison, 2024–2025

AWARDS & HONORS from the University of Tennessee

2025 Plant Sciences Graduate Student Poster Competition — 1st Place

2025 Southern Agricultural Economics Association Annual Meeting — 2nd Place – Graduate Student Poster Competition

2024 CANVAS Conference – Crop Science Society of America, Forage and Grazinglands (C06) — 2nd Place – 2024 Robert F. Barnes Poster Competition

2023 UT Beef & Forage Center Annual Research and Recommendation Meeting — 1st Place – Graduate Research Poster Competition