

Dr. Elizabeth Guertal

Auburn University y Kansas State University, USA.

PhD Project Director, Center of Excellence on Mitigation, Adaptation, and Resilience to Climate Change (CEMARCH).

Sustainable Intensification Innovation Lab (SIIL) Kansas State University Kansas, USA.

EDUCACIÓN: B.S. Agriculture. 1984. The Ohio State University; M.S. Soil Science. 1988. The Ohio State University. Ph.D. Soil Science. 1993. Oklahoma State University.

EMPLEO

1984 to 1988. Graduate Student Teaching Assistant, The Ohio State University, Dept. of Agronomy
1988 to 1993. Graduate Research Fellow. Oklahoma State University.
1993 to 2022: All at Auburn University, AL: Assistant Professor, Soil Fertility (93 to 98), Associate Professor, Soil Fertility (98 to 00), Alumni Associate Professor (00 to 03), Soil Fertility, Alumni Professor (03 to 06), Soil Fertility, Professor (06 to 2016), Rowe Endowed Professor (2016 to present) - Soil Fertility
2022-present: Project Director, Center of Excellence on Mitigation, Adaptation, and Resilience to Climate Change (CEMARCH), Sustainable Intensification Innovation Lab (SIIL), Kansas State University

HONORES Y DISTINCIONES

1. Outstanding Instructor in the Dept. of Agronomy and Soils, Auburn University, 1995, 2001, 2004.
2. Auburn University Leischuck Endowed Presidential Award for Excellence in Teaching, 2010.
3. Awarded 'Alumni Associate Professor' status, 2000, Auburn University. 5-year title for 5 highly productive faculty at Auburn.
4. Fellow, American Society of Agronomy, 2009.
5. Fulbright Fellowship, University of Mauritius, 2009-2010.
6. Fellow, Crop Science Society of America, 2011.
7. Fellow, Soil Science Society of America, 2013.
8. Outstanding Graduate Advisor, Auburn University, 2016.
9. Awarded the Rowe Endowment – Professorship, Auburn University, May, 2017.
10. Grau Award for Turfgrass Science, Crop Science Society of America, 2021.
11. CSSA Presidential Award, 2022

ENSEÑANZA - Cursos impartidos cada año (varios semestres) en los últimos cinco años (antes del retiro) y Cursos impartidos cada año durante los últimos cinco años (hasta el verano de 2022):

Los cursos de prácticas son créditos para supervisar las experiencias laborales de los estudiantes fuera de la Universidad, que se imparten en cada semestre. Los años indicados van desde el semestre académico de verano de un año hasta la primavera del año siguiente.

Los cursos con un número '5xxx' o '6xxx' son clases para graduados o junior/seniors avanzados. Los cursos con el último número "6" o "3" indican versiones a distancia de esas clases. Los alumnos matriculados en las versiones a distancia están fuera del campus y asisten a la clase al mismo tiempo que los alumnos "presenciales". Las cifras son totales para ese año académico, ya que a menudo impartía clases dos veces al año (un semestre académico y también en verano).

Course Semester/Year	Course Number(s)	Course Name	Lecture Hours (+ Lab – Y/N)	Student Nos
2015-2016	CSES 3150	Turfgrass Management	4 (Y)	49

	CSES 3920	Internship	3 (N)	8
	CSES 4950	Senior Seminar	2 (N)	3
	CSES 5020/6020/6026	Nutrient Management	3 (N)	43
	CSES 2040	Introductory Soil Science	4 (Y)	8
	WILD 1000	Wildlife Food Plots	2 (N)	23
2016-2017	CSES 3920	Internship	3 (N)	5
	CSES 4950	Senior Seminar	2 (N)	19
	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	46
	CSES 2040	Introductory Soil Science	4 (Y)	57
	CSES 5160/6160	Advanced Turfgrass	3 (N)	6
2017-2018	CSES 3920	Internship	3 (N)	8
	CSES 4950	Senior Seminar	2 (N)	14
	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	37
	CSES 1010	Soils and Life	4 (Y)	20
	CSES 5160/6160	Advanced Turfgrass	3 (N)	5
2018-2019	CSES 3920	Internship	3 (N)	13
	CSES 4950	Senior Seminar	2 (N)	24
	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	68
	CSES 1010	Soils and Life	4 (Y)	26
	CSES 5160/6160/5163/6166	Advanced Turfgrass	3 (N)	13
2019-2020	CSES 3920	Internship	3 (N)	8
	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	62
	CSES 1010	Soils and Life	4 (Y)	22
	CSES 5160/6160/5163/6166	Advanced Turfgrass	3 (N)	9
2020 -2021	CSES 3920	Internship	3 (N)	10
	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	74
	CSES 1010	Soils and Life	4 (Y)	71
	CSES 5160/6160/5163/6166	Advanced Turfgrass	3 (N)	11
	CSES 1020	Crops and Life	4 (Y)	5
2021-2022	CSES 5020/5023/6020/6026	Nutrient Management	3 (N)	65
	CSES 1010	Soils and Life	4 (Y)	62
	CSES 1020	Crops and Life	4 (Y)	22

COMPROMISO – Imparte, por término medio, 12 talleres o seminarios al año en el ámbito general de la gestión del suelo en céspedes, análisis del suelo y fertilidad del suelo. Ponente invitada en reuniones en 35 estados, y en Inglaterra, Vietnam, Filipinas, Jamaica, Tailandia, Argentina, México, Cuba, Mauricio, China, Japón, Canadá, Suecia, Países Bajos, Brasil y Alemania.

FORMACIÓN DE ESTUDIANTES GRADUADOS (1993 a 2023 (se retira del asesoramiento en 2022):

Major Advisor				Committee Member			
Completed		In Progress		Completed		In Progress	
MS	PhD	MS	PhD	MS	PhD	MS	PhD
28	3	1	0	25	17	0	0

ACTIVIDAD DE BECAS: Financiación total de becas como IP principal (o único) (1993-2011): 3,1 millones de dólares, Total como IP junior: 1,2 millones. Coautor de 6 divulgaciones/patentes de invención.

PUBLICACIONES: Libros o capítulos de libros: 6; Artículos de revistas arbitradas: 72; Resúmenes: 187; Publicaciones/artículos comerciales: 93; Webinars (impartidos tanto en inglés como en español): 55.

Servicio Universitario:

University Promotion & Tenure Committee, 2006-2009 and 2020-2022 (upon retirement ended service).
Appeals committee, 2010, 2013, 2019.
University Committee on Intercollegiate Athletics, 2004-2009.
Lead writer, Self-study document for the NCAA 10-year review of the AU Athletic Dept., 2006
Co-Chair, Auburn University Strategic Planning Committee, 2020

Servicio en una Sociedad Profesional (no incluido en la lista anterior):

President, Crop Science Society of America, 2019
Chair, Division C-5 (Turfgrass Science), Crop Science Society of America, 2006
Associate Editor, Soils, Agronomy Journal, 1995-1999
Associate Editor, Division S-8, Soil Science Society of America Journal, 1996 – 2003
Associate Editor, Crop Science, 2002 – 2007, Technical Editor, Crop Science, 2007 - 2013.
Panel Manager, USDA-ARS Soils and Soil Biology Panel, 2002.
Editor-in-Chief, All Agronomy publications, American Society of Agronomy, 2014-2017 (resigned when elected President-elect of CSSA).

Artículos en Journals recientes:

Guertal, E.A. and L.E. Datnoff. 2021. Silicon in turfgrass: A review. Accepted for publication in Crop Science June, 2021. <https://doi.org/10.1002/csc2.20591>

Impact of iron formulations on topramezone injury to bermudagrass. Adam P. Boyd, J. Scott McElroy, David Y. Han, Elizabeth A. Guertal. 2020. Weed Technology. pp. 1-16. (first author was my graduate student).

E.A. Guertal and J.S. McElroy. 2018. Soil type and phosphorus fertilization affect *Poa annua* growth and seedhead production. Agron. J. 110:2165-2170.

Price, A.J., Williams, J., Duzy, L.M., McElroy, S., Guertal, B., Li, S. 2018. Effects of integrated polyethylene and cover crop mulch, conservation tillage, and herbicide application on weed control, yield, and economic returns in watermelon. Weed Technology. 32:623-632.

Stallings, A.M., K.S. Balkcom, C.W. Wood, E.A. Guertal, and D.B. Weaver. 2017. Nitrogen mineralization from 'AU Golden' sunn hemp residue. J. Plant Nutri., 40:50-62. (was on the graduate committee of first author)

C. Z. Ogles, E. A. Guertal and D. B. Weaver. 2016. Edamame cultivar evaluation in central Alabama. Agron. J. 108: 6: 2371-2378. (first author was my graduate student)

Sidhu, R.S., Dougherty, M., Zech, W.C., Guertal, B. 2015. Cost effectiveness of erosion control covers during vegetation establishment. J. of Water Resource and Protection 7:119-129 (was on the graduate committee of first author)

Ogles, C.Z., J.M. Kemble, A.N. Wright, E.A. Guertal. 2015. Evaluation of an organic nitrogen source in a yellow squash–collard rotation. HortScience 50:51-58. (first author was my graduate student)

James D. McCurdy, J. Scott McElroy, and Elizabeth A. Guertal. 2013. White clover (*Trifolium repens*) establishment within dormant bermudagrass turf: cultural considerations, establishment timing, seeding rate, and cool-season companion grass species. HortScience 48:1556-1561. (was on the graduate committee of first

author)

Actividades internacionales seleccionadas:

- 2021-2022: Jefferson Science Fellow, Washington DC, 2021. Worked on year-long assignment to USAID.
- 2018-2019: Core partner member of the SOILS Consortium, a program within the Feed the Future Sustainable Intensification Lab at Kansas State University. This focus was on West Africa.
- 2009-2019. Work with and signed university-level agreements with various agricultural entities in Cuba (University of Havana – Ag College, CENSA). This included various visits to Cuba, student and faculty exchanges, and collaborative research.
- Mini-sabbatical at the Sports Turf Research Institute, Bingley, England. July 12th, 2014 to August 16th, 2014.
- Part of College of Ag/Building Science/Architecture trip to Haiti. Program was funded with the support of Gorrie Construction. May 12 – 16th, 2014. This project was on-going through 2016. 2010.
- Awarded Fulbright Fellowship, Mauritius. Taught Soil Science and Turfgrass Management and conducted turfgrass research at the University of Mauritius, August – Dec, 2010. Because of this conducted on-line soils short courses with the Mauritian Regional Training Centre, 2020.

Selección de actividades nacionales y estatales recientes:

- Auburn University, 2016-2019 – teach each semester in the ‘Sparks in Science’ prison education program, teaching at various prisons in Alabama.
- Member, AAPFCO committee for the review of Slow Release Fertilizers, James Bartos, Chair, 2019.
- Member, Legislative team for lobbying on the Hill, Crop Science Society of America, March 7-8th, 2018.
- Served on the USDA-AFRI grant selection panel, Dec, 2017. Panel member for the Capacity Building Grants for Non-Land Grant Colleges program.
- Served on the USDA-AFRI grant selection panel for Sustainable Agricultural Systems, 2022.
- 2013, 2014 and 2015. Judge of applications submitted to the Golf Course Superintendents Association of America (GCSAA) award program: Environmental Leadership Awards
- 2013. Turfgrass/soils expert for the US Corp of Engineers Committee to review technical documents for Levee Stabilization program, Corps of Engineers, Louisiana. I was one of 4 experts to serve on this appointed panel.
- Voting Representative for the Sports Turf Management Association (STMA) to the ASTM. Attend twice yearly meetings of ASTM and vote on standards related to turfgrass. 2010-2011.
- Member, WSS Turf Racing Surface Committee (Horse Racing - The Jockey Club), 2008-2014. Also consulted on polo field (2017-2021) in Argentina and Alabama, and equine event courses (Maryland, 2021).
- 2013-2020. For the past seven years I wrote a monthly column called ‘Verdure’ for the trade publication Golf Course Management. This column takes published research (from Crop Science or Agronomy J. or HortScience, etc.) and distilled it down to 500 words for a take-home message to golf course superintendents.
- Member, Slow-Release fertilizer committee, AAPFCO, 2019-present. This group is evaluating the 15% rule for slow-release fertilizer materials.