

Leah Brueggeman

Dept. of Crop and Soil Sciences

Clark Hall Rm. 325 Box 646420

College of Agricultural, Human, and Natural Resource Sciences

Washington State University

Pullman, WA 99164-6420

Email: leah.brueggeman@wsu.edu

Phone: (701)373-1438

TEACHING NARRATIVE:

The challenges of teaching a required introductory course include making the information pertinent as well as memorable. Students are required to memorize many terms and concepts that are unfamiliar to them in an intro course. Much of the information from these classes isn't appreciated until later in their college or professional careers.

The guiding philosophy or principal that I keep in mind when lecturing or designing a lab is to either give students a piece of knowledge that is required for their profession or one that will inspire more learning through discovery and curiosity. Both contribute equally to a valuable education.

One vital skill I draw on is my rapport with students. I engage my students as peers with an appreciation for their background and their experiences as part of the learning process. I believe if students feel an interest from the teacher they are more likely to be invested in the class. Since introductory classes can take considerable time and effort because of the high amount of memorization, the investment by the student can be significant. I find a personal style of teaching helps me to motivate and generate that commitment. The students look forward to coming to class; they know I will work with them to help them succeed and they see that I'm interested in their goals and expectations.

Although my focus is teaching and not research, I stay current on the literature and incorporate the most topical discoveries both through traditional lecture and planning of the lab exercises. I make an effort to learn or refresh a subject by attending other classes at the university or topical workshops. Taking classes helps me to remember the student perspective and contributes to an essential collaborative network.

CAREER HISTORY:

Assistant Professor of Teaching – Washington State University

(Fall 2019-present)

Courses: My main teaching responsibilities are the Geographic Information classes offered by the Department of Crop and Soils

Soils 368 *Introduction to Geographic Information Systems (Every Fall/Spring)*

Soils 468/568 *GIS Spatial Analysis (Every Spring)*

Soils 374 *Introduction to Remote Sensing (Spring 2020)*

Soils 202 *Introduction to Soils Laboratory (Spring 2019)*

Soils 499 *Independent Research Project (Spring 2022)*

Summary of Fall 2020 – Fall 2022

Term	Prefix	Course #	Title	Credits	Enrollment	%Responsibility	Instructor Rating (median)
Fall 2020	SOIL	368	Intro to Geographic Information Systems	3	87	100	3.8
Fall 2020	SOIL	368 GC	Intro to Geographic Information Systems	3	73	100	4.3
Spring 2021	SOIL	374	Intro to Remote Sensing	3	29	100	4.5
Spring 2021	SOIL	468/568	Geospatial Analysis	4	17	100	4.8
Spring 2021	SOIL	468/568 GC	Geospatial Analysis	4	15	100	4.8
Fall 2021	SOIL	368	Introduction to Geographic Information Systems	3	70	100	4.4
Fall 2021	SOIL	368 GC	Introduction to Geographic Information Systems	3	78	100	4.7
Spring 2022	SOIL	468/568	Geospatial Analysis	4	22	100	4.6/4.8(L)
Spring 2022	SOIL	468/568 GC	Geospatial Analysis	4	25	100	4.8
Spring 2022	HORT/ CROP	102 Distance	Introduction to	3	41	100	3.6
Fall 2022	SOIL	368	Introduction to Geographic Information Systems	3	68	100	4.5/4.6(L)
Fall 2022	SOIL	368 GC	Introduction to Geographic Information Systems	3	89	100	4.1/

**Faculty Lecturer- NDSU College of Natural Resources, Soils Department
(Fall 2015- Spring 2019)**

SOILS 210, lab sections

The main responsibilities of this position include teaching 6-8 laboratory sections for an Introductory

Soils class (SOILS 210), including curriculum development and mentoring graduate teaching assistants.

Lecturer (Fall 2017): SOILS 322, Soil Ecology NDSU College of Natural Resources, Soils Department

I was directly responsible for the curriculum and lecture of this class. I reorganized the original structure of this class to include a lab.

Additional Comments: Dr. Frank Casey, chair of the Soils Department, NDSU :
"Student comments are some of the most complimentary I have ever read, and are consistent each time the course is taught. Almost every single comment from SOIL 210 in 2016 was over-the-top positive."

ACADEMIC QUALIFICATIONS:

B.S Soil Science, Washington State University, 2004

M.S Soils and Land Resources, University of Idaho, 2009: "Copper Sorption to Smectite Clays in the Presence of Citrate", major advisor: Dr. Dan Strawn

PROFESSIONAL EXPERIENCE:

Experience in the lab setting has contributed to my more active-learning style of teaching. I have extensive knowledge in laboratory preparation and management. This includes the written portion of the lab experiments as well as the design of the learning outcomes. I have experience managing undergraduates/graduates to accomplish the extensive laboratory set-up required for a class with an average enrollment of over 100 students.

I use assessment regularly to evaluate and revise my teaching method. I encourage students to give direct feedback about which methods they prefer and this is another way I connect with students. Accurate assessment of learning is a critical skill in developing a sound method of instruction. I am well-versed in commonly used methods of both indirect and direct assessment. As a member of the AFS Assessment and Curriculum committee, I participate in the design and oversight of assessment methods.

Committee/University Involvement

Academic Integrity Hearing Board (Fall 2020-present)

AFS Assessment and Curriculum committee (Spring 2020-present)

Memberships

Soil Science Society of America (SSSA)

Washington Urban and Regional Information Systems Association (WAURISA)

Certifications/ Training

Distance Learning Mastery Certificate (2021)

- This certificate is earned after showing competence in all aspects specific to fostering student success in the distance delivery environment.

Awards and Honors

Nominated for the Earl and Dorothy Foster Excellence in Teaching Award, NDSU Agriculture and Extension Faculty/Staff Awards, 2019

Alpha Gamma Rho: "Faculty of influence award:" This is an appreciation event for faculty that have been voted as most influential to the fraternity in their undergraduate education (2017 and 2018)

Presentations (2020)

AOI pedagogy presentation "Team Based Learning: An Active Learning Approach"

Pandemic pedagogy presentation " Reworking the 50-minute Lecture: Strategies for increasing interaction and decreasing screen-time"