INFORMATION PACKET FOR THE VIRGIL ORR AWARD

TEACHING PHILOSOPHY

My approach to teaching is based on certain principles that I aspire to live by every day. My motivation to institute these principles is strongly driven by experiences I had with individuals that believed in me and gave me opportunities to succeed throughout my career. In the following lines, I will summarize these principles. I feel that if students take these principles to heart, then the quality of students at Louisiana Tech would be unmatched.

Respect-I respect each student’s endeavor and what they are trying to accomplish as a student in college. I tell each class this in the hope that a mutual respect can be established between us. Once they are comfortable and not intimidated, I feel they are more willing to ask questions, come to me for advice about anything, and work harder to perform well in the classroom. Sending the message that I genuinely care is important to instill a level of trust with students while each party understands the traditional boundaries in place.

Ownership-The word ownership is defined as “the state or fact of being an owner.” I define ownership more as “the act of taking responsibility to make something your own”. I encourage students to put all of their effort into preparing for tests, doing assignments, and being diligent with punctuality and attendance. As students understand the importance of “owning” an endeavor and their performance, they will convey to others that they are trying their best and want to truly succeed. As a result, people who are evaluating them will have more information from which to recommend them as good students, and hopefully one day, good prospects as employees in their chosen careers. I’m known for saying, “whether you are sweeping the kitchen floor or performing open heart surgery, do your best work, because someone is always watching.”

Learning-I have always had a strong desire to learn, and my hope is that this desire will resonate to the students in my classes. It is my job to teach plant science courses to students from various backgrounds and that have different methods to learn material presented to them. For this reason, I present lecture notes using Microsoft PowerPoint in outline form, and I get positive feedback from students for using this format as it gives them a more organized set of notes to study. I do my best to keep information current by incorporating relevant research findings through agricultural extension bulletins and published articles. I believe strongly in hands-on learning and going on field trips so students can see the material and concepts they learn in the classroom put into reality by people who do it every day for a living. I have taken students on more than a dozen field trips in the region to see plant nurseries, gardens, farms, and research. Destinations have stretched from El Dorado, AR to Hammond, LA to Mobile, AL.

Listening-A major part of communication is listening. Giving students time while they visit with me during office hours, when asking questions or commenting in class, or during advising indirectly affects teaching in a positive way. I feel it helps with establishing the mutual respect mentioned earlier. I encourage students to give me feedback during evaluations so I can make my courses better in the future. Through listening, I am able to refine my teaching philosophy in order to make it more effective.

RESEARCH PHILOSOPHY

As a scientist, I challenge myself to use the experience and training I have gained in my career towards finding answers to questions that contribute to the scientific community and that can help individuals operationally in agricultural production. I am a tree seedling nursery specialist. My research goals are to help nursery managers understand and solve issues encountered during the growing of seedlings in the nursery and to continuously improve the quality of seedlings for good growth and survival after planting. Some of my research publications have involved seedling responses to fertilization, irrigation, herbicides, fungicides, soil-injected fumigants, foliage removal, soil textures, and genetics. Results from these trials helped to understand a scientific question and improve nursery production for those with boots on the ground.

One of the most fulfilling aspects of my job is being able to use my research to expose students to the scientific method, and at the very least, what to expect if they decide to pursue a graduate degree in the sciences. I have
been fortunate in my life to have gained much research experience with various people and in various places. Part of my daily motivation is to pay my experiences forward by seeking inquisitive minds willing to put in just a little more time and work a little bit harder in order to experience new things. In 2014 and 2015, I received undergraduate research mini-grant funding through the College of Applied and Natural Sciences (ANS). The students who worked on these projects helped to install and monitor the trials, collect, record, and analyze data and develop and present a poster at the annual College of ANS Research Symposium.

I value collaboration immensely, and feel that together with other experts, more robust research can be performed and contributions made to science. I have collaborated with other faculty at Tech outside of my Department, which helps to foster relationships as well as provide recognition for the University. In my time at Tech, I have collaborated with people from across Louisiana and in Alabama, Georgia, Idaho, North Carolina and Virginia.

SERVICE PHILOSOPHY
Even if it was not a job requirement, I feel that service to the community and university would be expected as a responsibility for university faculty. As experts in our respective fields, it is important for faculty to give back in a way for others to get accurate information. Louisiana Tech University is the only University in North Louisiana with a Plant Science concentration, and as the only Plant Science faculty and staff in the region, we are routinely called upon from the community for assistance with landscaping, gardening, plant health diagnostics and plant identification. In addition, local Master Gardener groups in Lincoln Parish and the surrounding parishes often ask me to teach training courses, and they also use our Plant Science facilities to grow plants. In return, they promote our program and the sale of plants grown at the Tech greenhouse to the public.

Many elementary school classes come to the Tech greenhouses every year for field trips to learn more about how plants are grown. Passing knowledge to young children in the community is in a way a type of recruiting for Tech. Our hope is that “we plant a seed”, and they remember there is an opportunity to have a career working in agriculture. It is also important for faculty to serve on university committees and volunteer for events such as judging science fairs/research symposiums and assisting with scholarship fundraising. This sends a message that we are “all in” for Louisiana Tech and our students.

RESEARCH

Refereed Journal Articles

Conference Proceedings Articles

**Research Reports**


**Poster Presentations** (Undergraduate Student Research Projects)


**Graduate Student Advising**

- M.S. Student-Jacob Reichley, Louisiana Tech University; Thesis: *Effects of plant growth regulators and fertilizer supply on the varietal performance of poinsettias.* Graduate Committee Chair (2014-Present).

- M.S. Student-Nicholas Barnwell, Auburn University; Thesis: *Herbicide tolerance and weed control in understory species of longleaf pine ecosystems.* Graduate Committee Member (2013-Present).

**Research Related Oral Presentations: Research Conferences and University/Community Workshops**


- 2015-It’s time we had this talk, do you know where baby trees come from? School of Biological Sciences’ Seminar Series, Louisiana Tech University, Ruston, LA, March 2, 2015.


GRANTS AND EXTRAMURAL FUNDING

Submitted (Verbal agreement in place and paperwork being prepared by funding agency and LA Tech)


Funded


- Hillard, M.M. (P.I.) and D.P. Jackson (Co-P.I.). (2013-2014). Funding to develop and renovate the area in front of and adjacent to the Louisiana Tech Farm Salesroom to create an attractive and educational space for agricultural products produced on South Campus. Lagniappe Ladies. Funded amount: $2,500


Not Funded


UNIVERSITY TEACHING

<table>
<thead>
<tr>
<th>Course Descriptor</th>
<th>Course Name</th>
<th>Quarter/Year Taught</th>
<th>Instructor Ratings</th>
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<td>PLSC 101</td>
<td>Introduction to Plant Science</td>
<td>Fall 2012/2013/2014</td>
<td>3.8 / 3.9 / 4.0</td>
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<td>Microcomputer Applications</td>
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<tr>
<td>PLSC 220</td>
<td>Greenhouse Management</td>
<td>Winter 2013/2014/2015</td>
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<td>Landscape Plants</td>
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<td>AGSC 516</td>
<td>Nutrition of Horticultural Crops</td>
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SERVICE

Community

- Organized and hosted a Private Pesticide Applicator’s Certification Workshop at Tech in January 2014 and 2015 where people can take an exam and get licensed to become a private pesticide applicator.
- Organized and hosted a Home Gardening Workshop at Tech in February 2014 and 2015 where I gave a total of four oral presentations that covered topics of organic gardening, tomato gardening and identifying and controlling weeds.
- Taught a total of four Master Gardener training classes for Lincoln, Ouachita and Winn parishes from 2013 to 2015 that covered topics of botany, plant nutrition, lawn care and weed science.
- Guest speaker at a Ouachita Parish Master Gardener monthly meeting in 2013 discussing seed biology and a Lincoln Parish Master Gardener monthly meeting in 2014 discussing mycorrhizae.
- Assisted the Lincoln Parish Master Gardeners with coordinating their annual community workshop in February 2013, 2014, and 2015 and with building raised vegetable beds at Cypress Springs Elementary.
- Organized and administered the Area FFA Horticultural contest in 2013, 2014 and 2015 and the State FFA Agronomy contest in 2015 at Louisiana Tech.

University

- Affiliate Assistant Professor, School of Forestry and Wildlife Sciences, Auburn University, 2012-2017
- Faculty representative to discuss Tech’s compliance with civil rights policies and procedures with a civil rights review team comprised of state Method of Administration staff in 2013.
- Served on the College of Applied and Natural Science’s Dean’s Advisory Committee, 2013-2015
- Made recruiting visits to West Ouachita High School in 2013 and Montgomery High School in 2014 to promote the Department of Agricultural Sciences.
- Louisiana Region II Science and Engineering Fair Judge in 2014 and 2015.
- Assist with the annual Poinsettia Scholarship Auction held in December of each year at Squire Creek Country Club and the annual Livestock Scholarship auction held in May of each year on Tech Farm.
- Faculty sponsor for Greenscape, the Plant Science club.