eric Landscape Design Studio

s humans, we are naturally evolving to the elements of our surroundings. We are constantly looking to get ahead and find a solution or adaptation to certain situations of our surroundings. Over time, the amount of water available to the residents in the West Texas area has declined drastically every year. The Ogallala aquifer drains at a rate of two feet per year. With the rising concerns of water usage, this created a problem for home owners. Each county implemented water restrictions on how much water can be used through an irrigation system in a given week. Residents tired of high water bills wanted a solutions. They turned to a new type of landscaping for individuals in the area called xeriscaping.

Charles Klein, PhD. associate professor and interim department chair of plant and soil science, saw that there was a problem with the amount of water individuals were using in the area, keeping the rising concern of water conservation in the back of his mind. The landscape architecture program began to look for avenues to help individuals in the area, as well as help students get experience. Looking for answers, he turned to the agricultural communications department. He had noticed that the agricultural communications department had applied for a simular grant a few years earlier, pertaining to their degree field. Klein wanted to get help from the agricultural communications department to create a similar grant proposal to the USDA from the landscape architecture program.

"A few years ago, agricultural communications program received a grant from the USDA, and so we in a way we patterned what they did and that is what gave us a lot of ideas for our grant proposal," Klein said

With the help of the agricultural communications department, Klein was able to get the first step of the plan out of the way. Landscape architecture received approval for the \$150,000 grant to get the program started in the fall 2016 semester.

"We looked at this as an opportunity to promote water wise plants and water wise landscapes for the community of Lubbock, while gathering research data for the USDA," said Klein.

The program will focus on research that will be conducted by Michael Hall, a graduate assistant for landscape architecture program. Hall will be the man in charge of the student's day to day operations and what designs get seen by the faculty. His research will be over the amount of water used on a xeriscape, or water wise landscape, compared to yards that simply have turf. The research gathered will have to be introduced after a two year period to the USDA about the information gathered from the projects.

"This is a research grant, so at the end of two years we will have to present to the USDA at some sort of a function of what our research has taught us. So there is a data collecting aspect to the program as well." Hall said.

This grant will also provide a stepping stone for undergraduate students in the landscape architecture degree plan to get real life experience while still taking classes. Texas Tech University's landscape architecture department has given the name Xeric Landscape Design Studio for the program. The two year grant given to the landscape architecture program is merely a small loan to help jump start the fall 2016 semester's program. It keeps the program stable as if it were a small startup business getting a loan for the first time. That is to keep the program afloat for only two years. They will have to find a way to create revenue for the program if they want it to be long lasting.

"The homeowner would pay a certain amount, probably an hourly rate, and hopefully after a two year grant we will have a system going of a perpetuating, selffunded little business. So I kind of look at the grant as a loan for small business, or shark tank if you will, to help start up the program," Klein said.

The program's main goal is to promote efficient water wise use to homeowners in the surrounding area. There is a lot of information out there about plants that can be used on a water wise landscape. What homeowner's struggle with is how do you put together these plants to make a meaningful composition in combination with how the program's students will see the yard. Everyday citizens of Lubbock do not have the knowledge or accessibility of tools to do the job that they want done.

"A customer will ask these questions. "What do I put

into the patio, where do I put the basketball goal, where do I hang my hammock?" You know that sort of thing. And we want to be able to get in there and use our knowledge to help these individuals with the questions and concerns that they have," Klein said.

Students do not yet have their landscape architecture license. You have to earn it through experience to be able to work on commercial properties. The students of the program will strictly be working on residential properties. They will not have to have their license to perform the work, but they will receive experience working on small projects. The program in a whole will get students to come in and design xeriscapes for clients. After designing the xeriscape, students will have to introduce their work to a faculty member for approval.

"Our main goal is to help people design landscapes in Lubbock to focus on water conservation, creating pure landscapes, drip irrigation, native plants and to get away from the generic plants that people in Lubbock use, or over use," Hall said.

After the approval process from the professors is done, the student then will take the blue prints to the client and give it to them for their decision if they want to hire a landscaping crew to proceed with the work. Students will only be working in the office for the program designing for clients; the program does not include anyone

implementing the plans after they have been drawn up. That is up to the homeowner whether anything on their property actually gets done. When the homeowner hires a landscaping crew and applies the design to their yard, then the research team for the program will come in and collect data on how much water was saved using water wise plants compared to regular, non-water wise traditional landscapes.

The potential for the program to have a lasting impression on the Lubbock community is great. The hope is to continue to get people around the area to notice the program and invite the team to design for them. In doing so, the landscape architecture program can continue water wise research for the future.









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