

Students learn urban farming with new Mesa Community College degree

Rebecca Smouse, The Republic | azcentral.com 10:09 a.m. MST February 5, 2016



(Photo: Cheryl Evans/The Republic)

Andre Chambers, 22, struggled to find his calling.

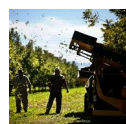
After high school, he began studies in criminal justice at Mesa Community College in 2011. A year later, he decided the career path wasn't the right fit and took another year away from school.

He returned to MCC to study biology, a subject he found interesting during high school. But while taking classes, a friend introduced him to the Urban Farmers Club on campus, which led him to the college's urban horticulture program. Now, he is studying how to grow crops.

Other students, like Jenna Hendrickson, knew farming was her passion early on.

As a little kid I was always drawing farms and barn houses and I didn't know why, the 31-year-old said. Now I know it's because I want to be a farmer.

Students like Hendrickson and Chambers are learning how to create and run their own businesses selling crops to their community through the college's newest associate degree in sustainable agriculture.



AZCENTRAL

Agriculture growth spurs calls for groundwater regulation in rural Arizona

(<http://www.azcentral.com/story/news/arizona/investigations/2015/12/09/agriculture-growth-spurs-calls-groundwater-regulation-rural-arizona/76738342/>)

Sustainable agriculture degree

The degree was introduced this spring semester under MCC's Urban Horticulture program, which focuses on landscape design, landscape contracting and management, nursery and greenhouse operations.



Mesa Community College student Cassiopeia Pattea transplants tomatoes during a Greenhouse management class on January 21, 2016. (Photo: Cheryl Evans/The Republic)

Landscape and greenhouse operations are "the backbone of our green industry," said Peter Conden, director of the Urban Horticulture program.

The two-year sustainable-agriculture degree includes courses in plant biology, crop science and small-business management. Students complete internships on nearby farms and work on the campus farm grounds. The grounds are located on the southeast side of campus, featuring crops, tractors and basic livestock.

Chambers, who is pursuing degrees in both urban horticulture and sustainable agriculture, said the courses are hands-on. He is now the president of the Urban Farmers Club on campus, and said many of his members, including himself, find remedy in working with the soil.

"I'm actually epileptic so I feel like it's very therapeutic for my own health," Chambers said.

Aquaponics a 'cutting edge' technology

Mesa Community College, in conjunction with the Roosevelt School District in Phoenix and aquaponics technology company RighTrac Inc., received an \$85,000 grant from the federal Environmental Protection Agency in September 2014. The school matched 25 percent of the grant and established a Center for Urban Agriculture at MCC. The center provides classes and workshops on healthy eating and local food production.

With the grant money, MCC also was able to develop an aquaponics course. The course teaches students how to grow fish and plants in a closed water system. The technology recycles water from a fish habitat to plants growing in water, saving time, space and energy for plant growth.

MCC aquaponics Professor Geogry Brooks Jr. said aquaponics is a "cutting edge" technology that he and his wife use to grow hundreds of pounds of food in their backyard every year.

Brooks said he wants his students to affect the urban farming industry through the use of aquaponics. He challenges his students to come up with agricultural solutions for national problems like childhood hunger and poverty.

"On the first day of class, I tell (the students) this is not about growing food," he said. "This is about what you are going to do with the food that you grow."

Greg Peterson, owner of online farming school UrbanFarmU, agreed. He said the fairly simple system is being set up in backyards around the county.

An aquaponics-based STEM curriculum for K-8 students was developed and introduced to Roosevelt School District classrooms with grant money, as well.



AZCENTRAL

Phoenix urban farmers shop in their backyards

(<http://www.azcentral.com/story/entertainment/home/2015/09/18/phoenix-urban-farmers-shop-backyards/71901614/>)

Peterson teaches in-person and online classes on urban farming techniques and said he's seen a significant increase in the amount of participants over the past eight years. He said people are motivated to grow food in their backyard for two reasons: rising food costs and concerns over overprocessed foods.

"People want to know what's in their food," he said.

Growing agriculture business

Peterson, who is a longtime friend of Conden, said he had "ah-ha" moments when he heard the sustainable agriculture program was approved at MCC.

"I would have had that program in 1979, it would have changed my life forever," Peterson said. "We need to get more and more people to know how to grow food in their yards."



Mesa Community College land lab tech Christee Rothbard moves compost material during a Greenhouse management class on January 21, 2016. (Photo: Cheryl Evans/The Republic)

Peterson said there are anywhere from 3,000 to 4,000 urban farms in Phoenix alone that have developed over the past eight years. His goal is to see 10,000 backyard farms.

Conden said there also is a demand in the industry for workers with basic skills in the agricultural business. Sustainable agriculture students like Olivia Summers, 21, said learning the business side of farming gives her a huge leg up.

"What makes me feel really empowered," Summers said. "This can help me be successful in life and help me know what I'm doing."

The student interest has been pouring in, Conden said. As of late January, about 10 students have declared sustainable agriculture as their major.

"We didn't even advertise this yet," Conden said.

Across the board, students in the program said they had goals of starting their own business.

"My dream is to have my own sustainable farm myself and hopefully be able to help others set up those things for themselves," Hendrickson said. "It's really fulfilling to have something you grew on your own and eat it on your table and share it with all of your family and friends."



[AZCENTRAL](#)

[Learn to grow your own food in the desert](#)

[\(http://www.azcentral.com/story/entertainment/home/2015/02/25/learn-grow-food-desert/23945633/\)](http://www.azcentral.com/story/entertainment/home/2015/02/25/learn-grow-food-desert/23945633/)

Read or Share this story: <http://azc.cc/1X8dMNI>

FREE BREAKFAST
FREE LONG-DISTANCE
Get a Room

The banner includes a photograph of a Red Roof Inn building, the Red Roof Inn logo, and a set of icons for Wi-Fi, phone, and calendar. A prominent red button with the text 'Get a Room' is also present.