

# ENGINEERING FOR COMMUNITY FOOD JUSTICE

## FABE 3200S - SPRING 2022



### About The Class

In this 3-hr service-learning course, open to all majors freshman through senior, we will explore contemporary issues related to food justice in The U.S. and in Columbus, OH. Together, the class will work closely with local organizations to identify and address needs and opportunities related to sustainable urban farming. Students will play a central role in identifying, formulating and solving real-world engineering design problems while studying relevant context around community-based organizations, racial justice, and community engagement dynamics. During spring semester, students will also regularly visit community partner sites while researching and developing projects in teams.

#### PARTNERS

Local community gardens, urban farms, and community social service organizations whose missions include providing affordable access to produce, increasing awareness of spiritual and cultural connections to gardening within black and brown communities, increasing children's exposure to functional STEAM studies, and increasing economic self-sufficiency and sustainability in the garden, at home, and in the community.

#### PROJECTS

- o Solar electricity generation
- o Hydroponics
- o Rainwater catchment
- o Farmbot
- o Compost systems
- o STEM-to-STEAM education modules
- o Automated season extension systems
- o Automated irrigation systems
- o Urban farm site design and planning

#### GOALS

The goals for the course include empowering students with the strategies, mindsets, and contextual understanding necessary to effectively and meaningfully engage with community-based organizations. The goals for the work include sustainably enhancing the productive and educational capacities of our partner organizations towards realizing a more just food system.

The Charles Madison Nabrit Memorial Garden  
South Side Family Farms -- Lutheran Social Services

“This course has taught me so much more than I ever expected. Not only do I have a clearer understanding of some of the systemic and discriminatory issues that have helped shape the problem of food insecurity in the United States, as well as some of the responses of the food justice movement, but I also have gained the ability to evaluate these issues and movements beyond the surface level.” - 2021 FABE 3200S Student

EMAIL DR. CHRIS RATCLIFF.21@OSU.EDU WITH ANY QUESTIONS!