



THE UNIVERSITY OF ARIZONA
BIOSYSTEMS ENGINEERING

Controlled Environment
Agriculture Center

Online Aquaponics Intensive Workshop

with Dr. Matthew Recsetar

October 19th & 20th- 9am-2pm MST AZ

Day 1:

Waiting room and discussion available at 8:30am

9:00 - 9:15am	Greeting and Course Overview
9:15 - 10:00	Introduction to Aquaponics and System Design
10:00 - 10:30	Tanks and Pumps Types, selection and sizing
10:30 - 11:30	Filtration Types of Filters Designing and building filters Purchasing Filters
11:30 - 11:45	Questions
11:45 - 12:00	Break
12:30 - 12:45	Making Your System Work for You Finding the Right Fittings, materials, growbeds Other Components Flood and Drain, Airlift
12:45 - 1:30	System Planning What to grow? Where to grow? Water source? Designing your system Parts Inventory Cost breakdown/budget
1:30 - 2:00	Questions

Day 2:

Waiting room and discussion available at 8:30am

9:00 - 9:15	Discussions and questions from previous day
9:15 – 9:45	Fish and Fish Care Fish transport and acclimation Stocking and feeding Care and Maintenance
9:45 -10:15	Growing Plants in Aquaponics Germination, seed trays, transplants Plant care and maintenance
10:15 – 10:30	Questions
10:30 – 10:40	Break
10:40-11:25	Water Quality and Nutrients (Discussion and Demo) Water quality parameters and limits Nutrient supplementation Measuring and maintaining water quality
11:25 – 11:55	System Management Daily tasks Maintenance Harvesting fish and plants
11:55 – 12:10	Questions
12:10 - 12:20	Break
12:20 - 12:50	Integrative Pest Management Prevention, monitoring Treatments: Organic vs conventional, biological
12:50 - 1:30	Troubleshooting, Tips and Tricks Leaks and repairs Shade, algal and bacterial build up, suspended solids, foam
1:30 - 2:00	Q&A and Evaluation Form+