



UA-CEAC's 2021 Online
Greenhouse Crop Production &
Engineering Design
Short Course



Controlled Environment
Agriculture Center

20TH ANNUAL CEAC GREENHOUSE CROP PRODUCTION & ENGINEERING DESIGN SHORT COURSE

Wednesday- March 3rd, 2021

10:00am-10:10am-	Welcome and Introductions
10:10am-10:50am-	Controlled Environment Greenhouse and Hydroponics- Limitless Opportunity Dr. Merle Jensen, Professor Emeritus, School of Plant Sciences, The University of Arizona, Founder of the UA-CEAC in 2000
10:50am-11:00am-	Questions
11:00am-11:40pm-	Hydroponics, Medium Composition & Delivery Systems Myles Lewis, MS, Owner, Arizona Vegetable Company & Instructor, CEAC Leafy Greens Intensive Workshop
11:40pm-11:50pm-	Questions
11:50pm-12:00pm-	10min Break
12:00pm-12:40pm-	Managing Plant Nutrition for Quality Crop Production Dr. Stacy Tollefson – Professor of Practice, Biosystems Engineering, The University of Arizona Instructor, CEAC Tomato Intensive Workshop
12:40pm-12:50pm-	Questions
12:50pm-1:30pm-	Greenhouse Structures- Glazing and Environmental Control Dr. Gene Giacomelli – Professor, Biosystems Engineering, The University of Arizona
1:30pm-1:40pm-	Questions
1:40pm- 1:50pm-	10 min Break
1:50pm- 2:30pm-	Monitoring Your Greenhouse Environment: Simple Tools to Technology Trends Dr. Murat Kacira – Professor, Biosystems Engineering, The University of Arizona Director, University of Arizona's Controlled Environment Agriculture Center
2:30pm- 2:40pm-	Questions
2:40pm-3:05pm-	Virtual Tour of CEAC Facilities and Research Highlights
3:05pm-3:35pm-	Breakout Rooms/ Networking

Wednesday- March 10th, 2021:

10:00am-10:40am-	Pest Identification and Control Strategies Dr. Stacy Tollefson – Professor of Practice, Biosystems Engineering, The University of Arizona Instructor, CEAC Tomato Intensive Workshop
10:40am-10:50am-	Questions
10:50am-11:30am-	Fundamentals on Supplemental and Sole Source Lighting for CEA Dr. Erik Runkle, Professor, Department of Horticulture, Michigan State University
11:30am-11:40am-	Questions
11:40am-11:50am-	10 min Break
11:50pm-12:10pm-	CEAC Mission Award Sponsor/ Exhibitor Presentations
12:10pm-12:50pm-	Fertigation Systems in CEA Dr. Neil Mattson, Professor, School of Integrative Plant Science Horticulture Section, Cornell University
12:50pm-1:00pm-	Questions
1:00pm- 1:30pm-	Panel 1
1:30pm-1:40pm-	10 min Break
1:40pm-2:10pm-	Breakout Rooms/ Networking
2:10pm-2:50pm-	Elements for a Successful Urban Ag Start-Up Jenn Frymark, Chief Greenhouse Officer, Gotham Greens
2:50pm-3:00pm-	Questions

Wednesday- March 17th, 2021:

10:00am-10:40am-	Fundamentals of Hemp- Opportunities and Challenges in the Industry Dr. Hope Jones, Founder & CEO, Emergent Cannabis Sciences
10:40am-10:50am-	Questions
10:50am-11:20am-	Panel 2
11:20am-11:35pm-	Sponsor/ Exhibitor Presentations
11:45am-11:55am-	10 min Break
11:55pm-12:35pm-	Plant Based Environmental Control Dr. Leo Marcelis, Professor of Horticulture and Product Physiology, Wageningen University
12:35pm- 12:45pm	Questions
12:45pm-1:15pm-	Breakout Rooms/ Networking (30 min)
1:15pm- 1:25pm	10 min Break
1:25pm-2:05pm	Organic Hydroponic Food Production Speaker TBD
2:05pm- 2:15pm	Questions
2:15pm- 2:55pm	Mushrooms in CEA Dr. Barry Pryor, Professor, School of Plant Sciences, The University of Arizona
2:55pm- 3:05pm	Questions