21st Annual
Greenhouse Crop Production and Engineering Design Short Course

MARCH 7
8:15 – 8:30 am  Welcome and Introductions by Dr. Murat Kacira

FUNDAMENTALS OF HYDROPONICS & CONTROLLED ENVIRONMENT AGRICULTURE (CEA):

8:30 – 9:15 am  Topic TBD
Dr. Merle Jensen- Professor Emeritus, School of Plant Sciences, The University of Arizona

9:15 – 10:00 am  Hydroponics, Medium Composition & Delivery Systems
Dr. Triston Hooks- Professor, Biosystems Engineering, The University of Arizona

10:00 – 10:20 am  Discussion of Previous Lectures, Q&A

10:20 – 10:50 pm  Break/ Exhibitor Networking

10:50 – 11:05 pm  3. 5 minute presentations from Sponsors/Exhibitors

11:05 – 11:50 am  Managing Plant Nutrition for Crop Production Optimization
Dr. Stacy Tollefson- Director of Cultivation, Aeriz

11:50- 12:00 pm  Discussion of Previous Lecture, Q&A

12:00- 1:00pm  Lunch Provided

1:00pm- 1:15pm  3, 5 minute presentations from Sponsors/Exhibitors

1:15pm- 2:00 pm  Greenhouse Design- Structures, Glazing, & Cooling
Dr. Gene Giacomelli- Professor, Biosystems Engineering, The University of Arizona

2:00pm- 2:10pm  Discussion of Previous Lecture, Q&A

2:10pm- 3:30pm  CEAC Tour (2 stations)/ Exhibitor Networking
MARCH 8

Title TBD:

8:30 – 9:15 am  Monitoring Your Greenhouse Environment: Simple Tools to Technology Trends  
Dr. Murat Kacira- Professor, Biosystems Engineering, The University of Arizona

9:15 – 10:00 am  Integrated Pest Management  
Dr. Kai-Shu Ling- Research Plant Pathologist, USDA- Agricultural Research Service

10:00 – 10:20 am  Discussion of Previous Lectures, Q&A

10:20 – 10:50 pm  Break/ Exhibitor Networking

10:50 – 11:05 pm  3. 5 minute presentations from Sponsors/Exhibitors

11:05 – 11:50 am  Automation in CEA  
Eric Highfield- Founder, High Yield Horticulture

11:50- 12:00 pm  Discussion of Previous Lecture, Q&A

12:00- 1:00pm  Lunch Provided

1:00pm- 1:15pm  3, 5 minute presentations from Sponsors/Exhibitors

1:15pm- 2:00 pm  Fundamentals of Supplemental and Sole Course Lighting for CEA  
Dr. Roberto Lopez- Professor, Michigan State University

2:00pm- 2:10pm  Discussion of Previous Lecture, Q&A

2:10pm- 3:30pm  CEAC Tour (2 stations)/ Exhibitor Networking
MARCH 9

Title TBD:

8:30 – 9:15 am  Hemp in CEA
Dr. Hope Jones- Founder & CEO, Emergent Cannabis Sciences

9:15 – 10:00 am  Strawberries Production and Technologies
Dr. Cheri Kubota- Professor of Horticulture and Crop Science, Ohio State University

10:00 – 10:20 am  Discussion of Previous Lectures, Q&A

10:20 – 10:50 pm  Break/ Exhibitor Networking

10:50 – 11:05 pm  3.5 minute presentations from Sponsors/Exhibitors

11:05 – 11:50 am  Mushrooms in CEA
Dr. Barry Pryor- Professor, School of Plant Sciences, University of Arizona

11:50- 12:00 pm  Discussion of Previous Lecture, Q&A

12:00- 1:00pm  Lunch Provided

1:00pm- 1:15pm  3, 5 minute presentations from Sponsors/Exhibitors

1:15pm- 2:00 pm  Aquaponics in CEA
Dr. Matthew Recsetar- Adjunct Lecturer, Biosystems Engineering, University of Arizona

2:00pm- 2:10pm  Discussion of Previous Lecture, Q&A

2:10pm- 3:30pm  CEAC Tour (2 stations)/ Exhibitor Networking