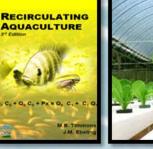


20th Annual Short Course June 23-27, 2014

Engineering Design of Recirculating Aquaculture (RAS), Hydroponic, and Aquaponic Systems









INSTRUCTORS: <u>Cornell University, Ithaca, NY</u> Dr. Michael B. Timmons: Aquaculture & Business Management

Aquaculture Systems Technologies, New Orleans, LA Dr. James M. Ebeling: Aquaculture/Aquaponics

<u>Continental Organics LLC, New Windsor, NY</u> Michael Finnegan, CEO: Business Management

REGISTRATION:

Limited Enrollment, Tuition \$1000 plus housing Register by June 13, 2014 Text for Course: "Recirculating Aquaculture" by Timmons and Ebeling, included in course packet.

Unlimited Enrollment for Distance Learning Course Packet (Aquaculture only; does not cover hydro or aquaponics)

FOR MORE INFORMATION

http://fish.bee.cornell.edu/short-course-info Dr. Michael B. Timmons, <u>mbt3@cornell.edu</u> or 607-255-1630 Mary Cornell, <u>mho5@cornell.edu</u> or 607-255-8596

ACCOMODATIONS:

MOUNT SAINT MARY COLLEGE DORMS \$30 single/\$45 double per night (limited/RSVP M. Cornell)

Homewood Suites by Hilton at Newburgh-Stewart Airport, 180 Breunig Rd, New Windsor, NY 12553 Tel.: 845-567-2700 <u>http://www.hiltonhomewoodstewartairport.com/webpag</u> es/contact.aspx

COURSE DESCRIPTION:

The first three days of this course (Monday-Wednesday) reviews the basic engineering principals behind a successful recirculating aquaculture system (RAS) The objective of this section is to provide design. sufficient information so that the participant will be able to design, construct, and manage their own RAS system. On the fourth day (Thursday), the fundamentals of growing plants using current state-of-the-art hydroponic techniques will be presented along with the design and management of these systems. On Friday, Aquaponics as a combination of aquaculture (fish) and hydroponics (plants) will be covered and several design options explored. Basic principles of business management for the small family farm will also be reviewed by guest speaker Michael Finnegan, CEO Continental Organics LLC.

A "distance" learning opportunity for aquaculture only is also offered (see website for details).

At the conclusion of the workshop, individuals will have the essential information necessary to design their own systems and have a fundamental knowledge of the principles influencing the numerous design options.

In addition, a FARM TOUR will be made to Continental Organics Inc. (2 acres of hydroponics and a 100,000 lb./year tilapia system); see www.conorgnx.com for farm details (within 10 minutes of educational venue).

LOCATION: Mount Saint Mary College 330 Powell Ave., Newburgh, NY 12550 http://www.msmc.edu/About_MSMC/Our_Location

Host Professor: Dr. Lynn Maelia, Chemistry