



# A COLLABORATIVE WORKSHOP FOR A FOOD AND NUTRITIONAL SECURITY COURSE

2017 NACTA Conference (June 28 - July 1, 2017)

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# PARTNERSHIP

- Project Director

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- Co-Project Directors

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United States Department of Agriculture  
National Institute of Food and Agriculture

## USDA NIFA PRIORITY AREAS

- Forming a partnership
- Supporting national issues; obesity, food insecurity, hunger
- Initiating recruitment and retention strategies through innovative plans on multidisciplinary training at graduate level

# FOOD-INSECURITY

- **Definition:** Those having difficulty providing enough food for all members at some time during the year (Coleman-Jensen *et al.*, 2014).
- **Threats** to health, education, and workforce readiness. Hunger costs our nation at least \$167.5 billion annually due to lost productivity, health care costs, and charity to keep families fed (Shepard *et al.*, 2011).
- **Educating the leaders of the future** will pay exponential dividends as motivated, experienced, educated students effect change on local and global levels (APLU, 2009).

# WORKSHOP PARTICIPANTS



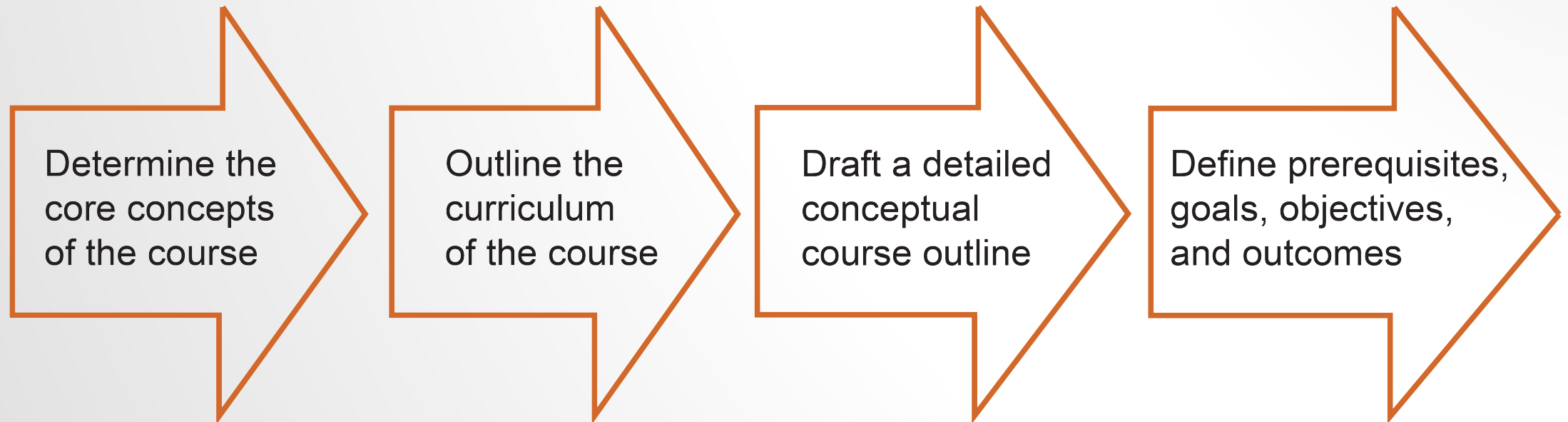
15 participants were associate professors, professors, professor emeriti having 3 - 40 years of teaching experience in higher education (average of 21 years)

- Agricultural Economics
- Horticultural Sciences
- Environmental Chemistry & Environmental Health
- Plant Nutrition
- Biotechnology
- Soil Science
- Water Engineering
- Food Policy, Nutrition & Economics
- Agricultural Education

# IMPACTS

- On students:
  - Understanding of food security concepts, careers
  - Communicating science knowledge
  - Knowing how to apply in community-based settings
  - STEM learning experience in grad students
- On faculty:
  - Increasing methods of interdisciplinary nature
  - Making teaching more learner-centered
- On education and society:
  - New educational network
  - Improving awareness and eventually human health

# STEPS OF THE WORKSHOP





# 4 KEY AREAS

- Nutrition Security
- Sustainability
- Hunger
- Human Impacts





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# COURSES

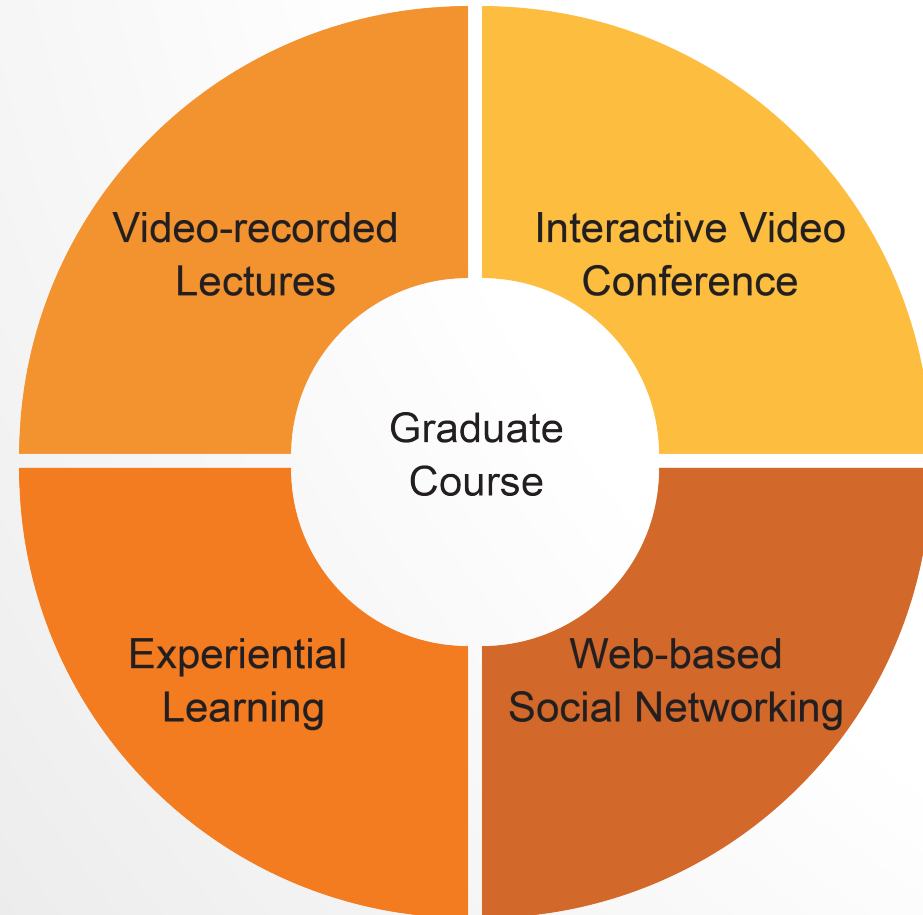
## The Nexus of Food & Nutritional Security, Hunger, and Sustainability

Interdisciplinary course focusing on students' STEM learning experiences and career skills to analyze complex information, make science-based decisions, and communicate scientific knowledge.

- Texas A&M: Hort 689
- Purdue: YDAE 59100
- Ohio State: FST 7194

More info: <http://agrilife.org/fnhs>

# DISTANCE LEARNING MODEL



# COURSE MODULES

- Global perspectives (3.0 hr)
- Food security and nutrition indicators and analysis context and indicators (3.0 hr)
- Framing the course and framing the problem (1.5 hr)
- Experiential learning and current Topics (1.5 hr)
- Food malnutrition and disease prevention (3.0 hr)
- Food-water-energy security under climate change (3.0 hr)
- Food production environment and soils (3.0 hr)
- Conflict migration and human capital (3.0 hr)
- Nutritional education, behavioral change and communication (3.0 hr)
- Food policy process and political economy (3.00 hr)
- Sustainability of alternative fruits and vegetable production increase food security (1.5 hr)

# AUTHENTIC ASSIGNMENTS

## Community Assessment

Conducted by teams

Place-based learning  
in local community

Observations and  
interviews

## Collaborative Presentation

Organized by teams

Identify experts from  
respective institution

Design and develop  
a short film

## e-Learning Tools

Developed by teams

Document key concepts  
with local needs

Integrate video, app,  
or game into an  
undergraduate course

# COURSE LEARNING OUTCOMES & KEY PERFORMANCE INDICATORS

- Solve problems using interdisciplinary thinking
- Interact with other disciplines
- Identify contextual variables to define the problem they are attempting to solve
- Think at the local, regional, national, and global levels
- Explain key indicators of food and nutritional security
- Value relevant application of various disciplines
- Expand degrees of freedom through interdisciplinary thinking

A faint, light-colored world map is visible in the background, centered on the Atlantic Ocean. The continents are rendered in a light beige or tan color, while the oceans are a very light, almost white color. The map is slightly blurred and serves as a background for the text.

# QUESTION & ANSWER