

HORT/AGED 5993
**Global Horticulture and Human Nutrition to Enhance Community
Resilience and Food Security**
University of Arkansas
Spring 2020

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Course Meeting Schedule: Asynchronous using Blackboard. Weekly Electronic Modules with Optional International Experience during summer.

Prerequisite: Graduate Level

Course Content, Discussion Posts, and Grade Tracking: <http://learn.uark.edu>

Catalog Description: This course covers three broad areas (*Global Horticulture, Sustainable International Development, Human Health and Nutrition*) and experts on three campuses created the instruction. The course is intended to be multi-disciplinary, and students should use their contextual knowledge to add to weekly discussions.

Please visit www.nexus.uark.edu for more information about faculty, staff, and educational opportunities associated with the course.

Course Objectives:

Over the course of the semester, student will be able to:

- Describe the nexus of human nutrition and horticulture in addressing international development.
- Identify food security issues brought about by famine to mitigate child and maternal nutritional deficiencies.
- Articulate theory of change using measureable impacts.
- Explain components of the value chain approach in international agricultural development including marketing systems.
- Identify food safety issues and explain the good agricultural practices that help prevent them.
- Explain how beneficial compounds in fruits and vegetables impact human nutrition.
- Describe methods of prevention of food loss through preservation and food processing.

Student Learning Outcomes:

- Students will understand basic concepts in horticulture, human health and nutrition, and international development.

- Using education and communications practices, students will be able to articulate how they can assist with addressing international development needs.
- Students will be able to identify food security issues brought about by famine and have greater understanding of child and maternal nutritional deficiencies.
- Students will be able to articulate the theory of change using measureable impacts.
- Students will be able to explain components of the value chain approach in international agricultural development including marketing systems.
- Students will be able to identify food safety issues and explain the good agricultural practices that help prevent them.
- Students will be able to explain how beneficial compounds in fruits and vegetables impact human nutrition.
- Students will be able to describe methods of prevention of food loss through preservation and food processing.

Methods for Assessing Learning Objectives: The expected learning outcomes for the course will be assessed through online modules and assessments, integrated reflection (discussions), and case studies.

Internet Connectivity: Students must be able to access Blackboard (<https://learn.uark.edu>) to post assignments and retrieve class information. You should check the course information posted on Blackboard regularly for messages from the instructor.

****You will post all written assignments to the assignment link the Blackboard lesson folders.** To post an assignment: Click on the assignment name located in the lesson folders in Blackboard. Click on the assignment you want to submit, click “Browse” to locate your file, then click “Open.” The file name you selected should now be displayed in the “file” field. If it is the correct file click “Save” if not locate the correct file then click save. Click “Submit” to post your assignment.

Assignments:

Pre and Post-test Assessment	20 points
Lesson Quizzes (14 at 10 points each)	140 points
Discussion Posts (14 at 6 points each)	84 points
Discussion Moderation	16 points
Case Studies (3 at 50 points each)	150 points
Content Area Reflections (3 at 25 points each)	75 points
Final Reflection	15 points
Total	500 points

Grading Scale:

- 450-500 points = A
- 400-449 points = B
- 350-399 points = C
- 300-349 points = D
- <300 points = F

Assignment Descriptions:

Pre- and Post-Assessments: As a part of the course, you will complete a pre- and post-assessment to determine your knowledge level at the beginning and end of the course.

Modules: Modules are found on UA Blackboard and provide course instruction. Additionally, each module will have a knowledge assessment (including discussion participation and quizzes) that must be completed by the end of the week in which the module is assigned.

Discussions: You are expected to participate weekly in the discussion prompts that are designed for you to thoughtfully consider what has been covered in class and using your educational and personal experiences address the question.

Discussion moderation: There is an expectation in this course that you will pose at least two questions during the semester and you will comment at least once weekly on your peers' questions.

Case Studies: You will complete two case study assignments throughout the semester.

Content Area Reflection: You will use the articles provided in Lesson 4 (Boyd & Fales, 1983; Bourner, 2003; Jordi, 2011) to write a two to four page reflective narrative on each content area: Sustainable International Development, Global Horticulture, and Human Health and Nutrition.

Final Reflection: You will use the skills developed through writing the content area reflective narratives to write a 2 to 3 page reflective narrative about your experience with the course (i.e. things learned, perceptions changed, behaviors changed, etc.).

Final Exam: The final exam will consist of the post-assessment for the end of the course.

Discussion Post Participation: Participation in course discussion board on Blackboard is essential to this course. You should be answering questions, posing additional questions for class participants', and answering your classmates' questions. This is intended to be an ongoing discussion on topics related to the course

Late Assignments: All assignments are due in class on the due date scheduled. All due dates are listed on the schedule. Late assignments will NOT be accepted, and students will receive a score of 0 for any assignments not submitted by the stated deadline. If an emergency arises that will require students to turn an assignment in late, or if a student will be absent for a university-approved function, they must submit documentary proof of the emergency or the university function. If an emergency does arise, students should call or email the instructor immediately. For absences related to university functions, students must work with the instructor at least one week in advance to develop a plan to complete any missed work.

University of Arkansas (UA) Academic Integrity: UA is committed to adhering to the highest levels of ethical standards. Any academic dishonesty will be dealt with as outlined in the university's "Academic Integrity Policy". Each University of Arkansas student is required to be

familiar with and abide by this policy which may be found at <http://provost.uark.edu/245.php>. Questions about how the policies apply to a particular situation, course, or assignment should be addressed immediately by contacting the instructor, department, or Provost Office.

UA Accommodations for Students with Disabilities: If you need any accommodation(s) due to a disability, please make arrangements to discuss this with me as soon as possible upon diagnosis. Students must be registered with the Center for Educational Access (479-575-3104; 209 Arkansas Union; ada@uark.edu), and you will need to hand-deliver an official Accommodation Letter from the Center for Educational Access requesting your accommodation(s) in the class.

Syllabus Content and Schedule Changes: The syllabus schedule and content may change at the discretion of the instructor. Such changes will be announced on Blackboard.

Projected Course Schedule: ASSIGNMENTS DUE EACH SUNDAY BY 11:59 PM

WEEK	CLASS TOPIC	ASSIGNMENTS	DATES
Week 0		<ul style="list-style-type: none"> · <i>Course pre-knowledge assessment</i> 	January 13 st -19 th
Week 1	The Nexus of Horticulture, Human Nutrition, and Agricultural Development (Lombardini/Davis-TAMU, Borlaug)	<ul style="list-style-type: none"> · <i>Lesson 1 Quiz</i> · <i>Introduction blog post to discussion board</i> · <i>Sign-up for Discussion Moderator Week</i> 	January 20 th -26 th
Week 2	Understanding Food Security (Brashears-TTU)	<ul style="list-style-type: none"> · <i>Lesson 2 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Case Study #1 (Sustainable International Development)</i> 	January 27 th – February 2 nd
Week 3	Famine (McKenney-TTU)	<ul style="list-style-type: none"> · <i>Lesson 3 Quiz</i> · <i>Participate in Weekly Discussion</i> 	February 3 rd - 9 th
Week 4	Theory of Change (Murphrey-TAMU)	<ul style="list-style-type: none"> · <i>Lesson 4 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Reflective Narrative #1 (Sustainable International Development)</i> 	February 10 th -16 th
Week 5	Human Health Challenges Related to Nutrition (Murimi-TTU)	<ul style="list-style-type: none"> · <i>Lesson 5 Quiz</i> · <i>Participate in Weekly Discussion</i> 	February 17 th -23 rd
Week 6	Child/Maternal Nutrition (Murimi-TTU)	<ul style="list-style-type: none"> · <i>Lesson 6 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Case Study #2 (Human Health & Nutrition)</i> 	February 24 th -March 1 st
Week 7	Measuring Impact (Murphrey-TAMU)	<ul style="list-style-type: none"> · <i>Lesson 7 Quiz</i> · <i>Participate in Weekly Discussion</i> 	March 2 nd -8 th
Week 8	Introduction to Horticulture in Developing Countries and the Value Chain Approach (Garcia-UA)	<ul style="list-style-type: none"> · <i>Lesson 8 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Reflective Narrative #2 (Human Health and Nutrition)</i> 	March 9 th -15 th

Week 9	Production Systems and Constraints (Garcia-UA)	<ul style="list-style-type: none"> · <i>Lesson 9 Quiz</i> · <i>Participate in Weekly Discussion</i> 	March 16 th - 22 nd
Week 10	Horticulture Market Systems (Lyford-TTU)	<ul style="list-style-type: none"> · <i>Lesson 10 Quiz</i> · <i>Participate in Weekly Discussion</i> 	March 23 rd - 29 th
Week 11	Good Agricultural Practices and Food Safety Issues (Gibson-UA)	<ul style="list-style-type: none"> · <i>Lesson 11 Quiz</i> · <i>Participate in Weekly Discussion</i> 	March 30 th - April 5 th
Week 12	Beneficial compounds in fruits and vegetables (Howard-UA)	<ul style="list-style-type: none"> · <i>Lesson 12 Quiz</i> · <i>Participate in Weekly Discussion</i> 	April 6 th - April 12 th
Week 13	Post-Harvest, Preventing Food Loss (Howard-UA)	<ul style="list-style-type: none"> · <i>Lesson 13 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Case Study #3 (Global Horticulture)</i> 	April 13 th - 19 th
Week 14	Preservation and Processing (Howard-UA)	<ul style="list-style-type: none"> · <i>Lesson 14 Quiz</i> · <i>Participate in Weekly Discussion</i> · <i>Reflective Narrative #3 (Global Horticulture)</i> 	April 20 th – 26 th
Week 15	Course Reflection and Review	<ul style="list-style-type: none"> · <i>Course post-knowledge assessment</i> · <i>Final Reflection</i> 	April 27 th – April 29 th *

***IMPORTANT: Course ends April 29th! Week 15 consists of two days.**