

# Syllabus–Fall 2017

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

### TAMU-HORT 689 (Special Topics)

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Texas A&M University-College Station-Room: CTQ 120B

**Lecture:** Tue and Thu 2:00 to 3:30 P.M.

This course will be offered simultaneously on TTVN (Trans Texas Video Network) to three different locations originated from Texas A&M University.

**Office Hours:** Tue: 4:00 – 5:00 PM or arranged by appointment, and also through phone and email. Office Location: Centeq Suite A120.

Course Description: HORT 689. The Nexus of Food & Nutritional Security, Hunger and Sustainability (3-0). **Credit 3.** Provides recent scientific advances in knowledge of food & nutritional security, hunger and establishes their relationship to sustainability and food systems. The course will broaden student education by engaging a diverse group of students to think critically about food sustainability issues and encourages students to study agricultural sciences by showing students the local relevance and global importance of these issues. Moreover, experienced, multidisciplinary faculty will provide key real-world perspectives and cutting edge teaching tools coupled with experiential learning opportunities

A unique integrated blend of conventional, worldwide web and distance education through TTVN will be used to stimulate and develop thought provoking and critical thinking abilities among students. Prerequisite: Approval of Instructor

**Learning Outcomes:** The student will gain advances in knowledge of food and nutritional insecurity issues and causes of hunger. They will be able establish relationship among food& nutritional security, hunger and sustainability.

#### Learning Objectives:

Upon completion of the course, the students enrolled in the course should be able to:

- Identify contextual variables to define the problem they are attempting to solve
- Explain key indicators of food and nutritional security
- Analyze the problems and relevant applications at local, regional, national, and global levels
- Solve problems using interdisciplinary thinking and explain relevant applications and synergistic benefits of interdisciplinary thinking
- Develop teamwork skills by interacting with other disciplines

**Course Outline:**

1. Introduction: Global perspectives (3.0 hr)
2. Food security and nutrition indicators and analysis context and indicators (3.0 hr)
3. Framing the course and framing the problem (1.5 hr)
4. Experiential learning and current Topics (1.5 hr)
5. Food malnutrition and disease prevention (3.0 hr)
6. Food-water-energy security under climate change (3.0 hr)
7. Food production environment and soils (3.0 hr)
8. Conflict migration and human capital (3.0 hr)
9. Nutritional education, behavioral change and communication (3.0 hr)
10. Food policy process and political economy (3.00 hr)
11. Sustainability of alternative fruits and vegetable production increase food security (1.5 hr)
12. Student presentations (9.0 hr)
13. Mid Term Review (1.5 hr)
14. Final Exam Review (1.5 hr)

**Experiential Learning:** Because the pilot course will implement a suite of *three hands-on learning activities*, every student will be part of an experiential learning model that emphasizes expanded learning outside the classroom discussion setting.

*First hands-on activity.* teams of 3 to 4 students will develop and conduct student-driven seminars on the key areas by identifying experts in Food & nutritional security, hunger and sustainability from their respective institutions. Each campus will have four seminars—one for each key area. This will give students valuable collaborative experiences with faculty, and exposure to diverse faculty and other scientific research perspectives.

*Second hands-on learning activity* (students need to write a short report). Each team will engage in a place-based learning experience by conducting a food security assessment in the local community. The four key areas will be explored through the following place-based examples.

Nutrition – attend the local basic training for the *National School Lunch Program* to understand its operation. Combine this with personal study on how nutritional security is related to reduced risk of chronic disease later in life.

Sustainability – visit a *local or university farm* that uses sustainable agricultural practices; learn about current techniques used to increase sustainability.

Hunger – visit a *local food bank* to see how they are using local foods to provide fresh produce to their customers

Human Impacts – shadow an *Extension Nutrition Educator* to see how they disseminate health/nutrition information to the public.

*Third hands-on learning activity.* Each team will document the community-based food security assessment by integrating the key concepts of food security with the findings from the place-

based learning observations and interviews. Graduate students will work together as teams and create e-learning tools to document localized food security needs and issues as they relate to the four key areas.

**Guest Lectures:** Many topics are presented by the recognized authorities in the field.

**Text:** No specific text book; however, the instructor will provide information in web page.

### **Exams and Grading**

Mid Term Exam	25 %	25 points
Final Exam-	20 %	20 points
Experiential Learning	45 %	45 points
Web and class discussion	10 %	10 points
		Total Points = 100 points

**Grading Scale:** 100 point scale, A=91-100. B=81-90. C=71-80. D=61-70. Your grade will be based on your mathematical average rounded to the next whole number.

**Attendance and Make-Up Exams** (<http://student-rules.tamu.edu/rule07>).

Students who miss an exam may be allowed to take a make-up exam, Makeup exams may differ in both form and content from the regularly scheduled exam. If you miss the exam, you must satisfy all of the following requirements in order to take a makeup exam.

If you missed the exam due to illness or university-excused absence, you must provide a satisfactory documentation explaining the reason for missing the test (for example, if you were ill, you must have a written excuse from your physician or from the University Health Center).

You must notify the instructor before the exam or within the next 48 hours after the exam.

Students who miss the exam and do not meet each of these requirements above will receive a score of zero for the exam.

### **Late Assignments:**

Late assignments/term papers are penalized at a rate of 10% loss in points per day late including weekends.

### **Academic Integrity Statement and Policy.**

**Aggie Code of Honor** <http://aggiehonor.tamu.edu/> : "Aggies do not lie, cheat, or steal nor do they tolerate those who do." Students are expected to attend all classes, complete assignments on time, and participate fully in class discussions and group projects. Violations will be handled in accordance with the Texas A&M University Regulations governing academic integrity.

### **Suggested Inclusions from Speaker of the TAMU Faculty Senate:**

*Copyright / plagiarism statement:*

“The handouts (all materials generated during this course) used in this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without research cannot safely be communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty”.

*Americans with Disabilities Act (ADA) Policy Statement:*

“The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in White Creek on west campus, or call 845-1637. For additional information visit <http://disability.tamu.edu>.”

**Calendar of Activities**

- Week 1- Introduction: Global perspectives (3.0 hr)-
- Week 2-Food security and nutrition indicators and analysis context and indicators (3.0 hr)
- Week 3-Lecture 1. Framing the course and framing the problem (1.5 hr)
- Week 3-Lecture 2.Experiential learning and current Topics (1.5 hr)
- Week4-Food malnutrition and disease prevention (3.0 hr)
- Week 5-Food-water-energy security under climate change (3.0 hr)
- Week 6-Food production environment and soils (3.0 hr)
- Week 7-Conflict migration and human capital (3.0 hr)
- Week 8-Nutritional education, behavioral change and communication (3.0 hr)
- Week 9-Food policy process and political economy (3.00 hr)
- Week 10-Sustainability of alternative fruits and vegetable production increase food security (1.5 hr)
- Week 11,12,13 Experiential learning Student Presentations (9.0 hr)
- Mid Term Review (1.5 hr)
- Final Exam Review (1.5 hr)