



University of Wisconsin – Madison

I. General Information

Course Title: World Hunger and Malnutrition
Course Subject/Number: Ag and Applied Economics 350, Nutritional Sciences 350, Agronomy 350, CALS Interdisc 350
Class Location: All On-line
Credit Hours: 3 Credits
Course URL: <https://canvas.wisc.edu/courses/100008>

Instructor contact information (** preferred contact), and office hours

Kyle W. Stiegert

[**kyle.stiegert@wisc.edu](mailto:kyle.stiegert@wisc.edu)

(608) 217-5836

516 Taylor Hall

M-Th 2:30-5PM

Taiya Bach

[**trbach@wisc.edu](mailto:trbach@wisc.edu)

(608) 265-2375

167 Nutritional Sciences

By appointment only

Course Designations and Attributes:

Breadth – Biological Sci. Counts toward the Natural Science requirement.

Level – Intermediate.

L&S Credit – Counts as Liberal Arts and Science credit in L&S.

Instructional Mode: All online

II. Instructional Information

Learning Objectives: The purpose of this course is to provide a broad and coherent understanding of issues and incidence of malnutrition in the world. We explore the biology and physiology of human nutrition and examine the socio-economic factors that affect food consumption and human nutrition in different countries. We analyze the policies used to alleviate hunger and malnutrition around the world. In completing this class, students will

- a. demonstrate a basic understanding of the complex links between nutrition and malnutrition,
- b. learn and apply the economic tools of supply and demand to solving/analyzing issues including income and population growth, income and population policies, and agricultural supply topics,
- c. synthesize knowledge about the economics and nutritional aspects of world hunger to better understand solutions,
- d. communicate effectively through written reports and online discussions, and
- e. collect data and information about the economic and nutritional aspects of world hunger as it pertains to a single developing nation.

OFFICIAL COURSE DESCRIPTION

Course Description: Hunger and poverty in developing countries and the United States. Topics include: nutrition and health, population, food production, and availability, and income distribution and employment.

How 3 credits are earned: the class is organized based on an expected time investment of 45 hours of work per credit hour. One credit is the learning that takes place in at least 45 hours of learning activities, which include time in lectures or class meetings, in person or online, labs, exams, presentations, tutorials, reading, writing, studying, preparation for any of these activities, and any other learning activities.

GRADING

Course Requirements and Grading:

This is an online class and there are no scheduled meeting times. However, there are several stages of the class that will require students stay current with the content. Students will be graded on four class components: quizzes, initial discussions, react and respond discussions, and a project. Final grades are not curved. Attendance is not part of the grading. There is not a specific participation grade in the class, but students will benefit from networking with other students or working together. There are 1000 points to earn in the class.

Graded Item	Number of items	Points per item	Total possible points
Quizzes	8	40	320
Initial Discussion posts	4	20	80
React and Respond Discussion posts	4	20	80
Assignments	4	130	520
Total	20		1000

Letter grades are determined based on how many of the 1000 points are earned:

Grade	Points Earned
A	900-1000
AB	850-899
B	800-849
BC	750-799
C	700-749
D	600-700
F	0-599

Details about Quizzes, Discussions and Project:

Quizzes are 40 points each representing 32% of final grade:

There are two quizzes each week for a total eight quizzes. They are scheduled based on completion of the relevant course content (see schedule below). Each quiz will be based on assigned material from the textbook, other assigned readings, and the audio lectures. Each of the eight quizzes is worth 40 points (8*40=320). Quizzes are taken online through Canvas. They are timed and involve multiple-choice type questions. Each quiz must be completed by the due date.

Initial discussion posts are 20 points each representing 8% of final grade:

Your instructor will assign a statement or a question and ask you to post original content on Canvas about the topic. The initial post is due by Wednesday of the first three weeks and Tuesday of the fourth week. The four initial discussion posts total to 80 points (4*20=80).

React and Respond discussion posts are 20 points each representing 8% of the final grade: After all the initial discussion comments are posted, the instructor will reveal all the posts to the class. Each student will react and respond to two students in the class about what they posted (these two posts are worth 20 points). The react and respond posts are due by Friday of the first three weeks and by Thursday of the fourth week. The four react and respond posts total to 80 possible points (4*20=80).

Assignments (52% of final grade).

Students are required to write four assignments that cover the nutritional and economic conditions of a single developing country. Student will be assigned one of three countries. Each assignment is worth 130 points (130*4=520 points). The scheduled due dates are according to the following:

Monday 5/27	Part 1: Introduction, Nutrition
Monday 6/3:	Part 2: Population and population growth;
Thursday 6/6	Part 3: Income, trade, income disparity, food subsidies.
Monday 6/10	Part 4: Farm Production, Technology, Efficiency and Policy.

Requisites: none

Required Materials:

Main Text for the Course

Leathers, Howard, with Phillips Foster. *The World Food Problem, Fifth Edition*,
Boulder: Lynn Reinner Publishers, Inc, 2017.

Papercopy ISBN: 978-1-62637-451-5

E-book ISBN: 978-1-62637-656-4.

Website:

https://rienner.com/title/The_World_Food_Problem_Toward_Understanding_and_Ending_Undernutrition_in_the_Developing_World_5th_edition

III. Other information and statements

Plagiarism: Plagiarism is a serious offense. All sources and assistance used in preparing your papers must be precisely and explicitly acknowledged. Ignorance of what constitutes plagiarism or academic misconduct is not a defense. It is your responsibility to be sure. The web creates special risks. Cutting and pasting even a few words from a web page or paraphrasing material without a reference constitutes plagiarism. If you are not sure how to refer to something you find on the internet, you can always give the URL. It is generally better to quote than to paraphrase from material on the web, because in the absence of page numbers it can be hard to find passages that are paraphrased rather than quoted. For more information on writing and source citation, the following may be helpful <http://writing.wisc.edu/Handbook/Documentation.html>

Academic Integrity: By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct comprises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. If you have any questions about what constitutes academic misconduct, please read the following information <http://students.wisc.edu/doso/acadintegrity.html> or come talk with one of the instructors.

Accommodations for students with disabilities: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

Module	Lecture Topics	Readings/Lectures	Assignments/Quiz/ Due Dates
Nutrition 1: Mon, May 20	Intro and Biology of Malnutrition	Lectures: 1a: Intro 2a: Definitions of Malnutrition 3a: Body response to starvation Readings: <ul style="list-style-type: none"> • Chapters 3 & 4 of text book • Keys Experiment article • State of Food Insecurity article 	<ul style="list-style-type: none"> • Please Complete Introductory Post about yourself. • Discussion Question 1 Posted for Review
Nutrition 2: Tue, May 21	Protein Energy Malnutrition	Lectures: 2a: PEM 2b: Types of PEM 2c: Microbiome Readings: <ul style="list-style-type: none"> • 2 Microbiome articles • WASH article 	
Nutrition 3: Wed, May 22	Micronutrient Malnutrition	Lectures: 3a: Vitamin A 3b: Iron 3c: Iodine Readings: <ul style="list-style-type: none"> • Anaemia in developing countries 	<ul style="list-style-type: none"> • Initial Discussion Posting 1 DUE • Quiz 1 DUE: Covering Nutrition Modules 1-3 material
Nutrition 4: Thu, May 23	Effects of Nutrition during the Life Cycle	Lectures: 4a: Lifecycle Nutrition-Mother 4b: Lifecycle Nutrition - Infant 4c: Lifecycle Nutrition – Child, Adolescent, Adult, Elderly Watch Growth Chart Video Readings: <ul style="list-style-type: none"> • Chapter 5 of Text book • WHO Growth Standards Identification of SAM article 	
Nutrition 5: Fri, May 24	Refeeding	Lectures: 5a: Refeeding-Changes in the Body 5b: Refeeding in the Child and other issues Readings: <ul style="list-style-type: none"> • Community Based Management of SAM article 	<ul style="list-style-type: none"> • React and Respond Discussion Posting 1 DUE (must respond to 2 separate classmates posts)

Nutrition 6: Sat, May 25	Nutrition Transition	Lectures: 6a: Nutrition Transition Readings: <ul style="list-style-type: none"> • WHO Healthy Diet Fact Sheet • WHO Obesity and Overweight Fact Sheet 	<ul style="list-style-type: none"> • Quiz 2 DUE: Covering Nutrition Modules 4-6 material
Sun, May 26	No Lectures or assignments. Note: Monday we switch to the economics portion of the course.		
Economics 1 Mon, May 27	Famine	-AF1 -Chapter 2 of text -Audio of BBC report on recent/ongoing famines	<ul style="list-style-type: none"> • Discussion Question 2 Posted for Review • Assignment 1 Due
Economics 2 Tue, May 28	Supply and Demand	AF2, AF3 Chapter 7 of text	
Economics 3 Wed, May 29	Population	AF4 Chapter 8 of text Part of Chapter 10 of text (pgs 163-167)	<ul style="list-style-type: none"> • Initial Discussion Posting 2 DUE
Economics 3 Thu, May 30	Population Policy	AF5 Chapter 18 of text	<ul style="list-style-type: none"> • Quiz 3 DUE: Covering Economics Modules 1-2 Material
Economics 4 Fri, May 31	Income	AF6 Chapter 9 of text Part of chapter 10 of text (167-end of chapter)	<ul style="list-style-type: none"> • React and Respond Discussion Posting 1 DUE (must respond to 2 separate classmates posts)
Sat, June 1			<ul style="list-style-type: none"> • Quiz 4 DUE: Covering Population, Population Policy, Income: (Chapters 8-10, 18) (AF4-6)
Sun, June 2	No Lectures or assignments.		
Economics 4 Mon, June 3	Income Policy	AF7 Chapter 17 of text	<ul style="list-style-type: none"> • Assignment 2 (Population and Population Policy)
Economics 5 Tue, June 4	Food subsidies and distribution	AF8 and Chapter 19 of text AF9 and Chapter 20 of text	
Economics 6 Wed, June 5	Land, water, environment	AF10 and Chapter 11 of text AF11 and Chapter 12 of text	<ul style="list-style-type: none"> • Initial Discussion Posting 3 DUE
Economics 7 Thu, June 6	Inputs and technology	AF12 Chapter 13 of Text	<ul style="list-style-type: none"> • Quiz 5 DUE: Covering Income Policy, food subsidies and distribution. (Chapters 17, 19,20) (AF7-9)
Economics 7 Fri, June 7	Inputs and technology	AF13 Chapter 14 of text	<ul style="list-style-type: none"> • Assignment 3 DUE • React and Respond Discussion Posting 3 DUE (must respond

			to 2 separate classmates posts)
Economics 8 Sat, June 8	Farm pricing and supply	AF14 and Chapter 21 of text AF15 and Chapter 22 of text	<ul style="list-style-type: none"> Quiz 6 DUE: Covering Land, Water, Environment, input intensity (Chapters 11-13) (AF10-12)
Sun, June 9	No Lectures or assignments. Complete revision to Part 3 of the project –AND- complete part 4 of project.		
Economics 9 Mon, June 10	Review and concluding concepts	AF16 Chapter 15 Chapter 16	<ul style="list-style-type: none"> Assignment 4 Due
Tue, June 11			<ul style="list-style-type: none"> Quiz 7 DUE: Covering technology, farm price, and food supply (Chapters 14, 21-22) (AF13-15) Initial Discussion Posting 4 DUE
Wed, June 12	No Lectures or assignments. Complete revision to Part 4 of the project –AND- complete part 5 of project.		
Thu, June 13			<ul style="list-style-type: none"> React and Respond Discussion Posting 4 DUE (must respond to 2 separate classmates posts)
Fri, June 14			<ul style="list-style-type: none"> Quiz 8 on concluding concepts (Chapters 15-16 and AF16)