

**Special Topics: AGECE 502(3): Food Economics and Health
Spring 2017**

Time: MW 4:35 pm-5:50 pm

Location: HOEC 0005

Instructor Information

Instructor

Di Fang

Email

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Office Location & Hours

Agriculture Building 218B

M W: 8:00am -10:00am

General Information

Course Description:

This course is designed to introduce the concepts of food, nutrition, and health as well as the economic and statistical tools we can apply to study issues in food, nutrition, and health. In part one, we will focus on food policy, US food system, Dietary Guidelines for Americans, and the connection between food, nutrition, and poverty. The section will provide an overview of the roles and interests of federal agencies, private-sector firms, and the media relevant to U.S. food and policy. In the second part, we will go over basic economic and marketing theories that can be applied to study the issues in food and health. Topics include supply and demand of food, food production function, adverse selection and moral hazard, and cost- benefit analysis. This section is designed to introduce the analytic tools commonly employed in the study of the economics of food and health. A third section will cover the issues in health economics including the US health care system, Medicare and Medicaid, demand and supply of health insurance, and comparing international perspectives on health policies and programs used to support global nutrition, health promotion, and wellness goals. The last section offers perspectives beyond the scope of food, nutrition, and health in the US and discusses the broader impact of food, nutrition, and health on social welfare, gender inequity, education, and poverty worldwide.

Class participation is crucial. Every student will have an opportunity to lead a class discussion on a topic of his/her choice. Class discussions will explore the connections among national, state and local food and nutrition policies, the economic impact of US healthcare system, nutrition and health claims, food insecurity and food desert, and food advocacy and activism to promote healthy food environments. Undergraduate and graduate students are expected to participate in the discussion that generates critical thinking and (friendly) scholarly debates. Graduate students are expected to finish a class project that applies the concept(s) learned in class to an empirical issue of interest.

This course is offered together with the undergraduate course AGECE 420(3). However, graduate students are expected to complete a class project outlined in the grading section.

Prerequisite: AGECE1103 or equivalent introductory microeconomics course, e.g., ECON 2023. Students are expected to be able to perform basic arithmetic, algebra, and geometry.

Expectation and Objectives:

Upon successful completion of the course, students are expected to:

1. Identify the economic, political, social and cultural factors that influence U.S. food and nutrition policies and impact national food systems.
2. Describe major processes and players involved in U.S. food policy development, implementation, monitoring, and evaluation.
3. Compare and contrast the federal food and nutrition programs administered by USDA.
4. Apply economic, statistical, and marketing tools to analyze the US healthcare and food industry.
5. Understand various issues present in the current US healthcare system and worldwide.
6. Develop critical thinking regarding systematic differences in the healthcare marketing worldwide.
7. Understand the importance of sustainable food marketing on global poverty.

Class Attendance:

Students are expected to attend every class. I will not take attendance but will give out 8 quizzes randomly. Keep in mind that quizzes will be administered at any point throughout the class period, and only those who are present are eligible to take the quizzes. Please also bear in mind you are now in a professional school, and a member of a learning community. Therefore it is your responsibility to be on time for class, do not leave the class while it is in progress, put your electronic devices on silent mode, be respectful of others' viewpoints even if you disagree with them, and dress appropriately for a professional activity. In the situations of emergencies and illnesses, the student is responsible for making timely arrangements with the instructor. Such arrangements should be made in writing (preferably via email) and prior to the absence. It is at the instructor's discretion to decide on the penalty of missing classes.

Course Materials

There is no required textbook for this course. All the reading materials, including book chapters and papers, will be posted on Blackboard or sent to you via email prior to class time. However, below is the list of books that we will read chapters from.

Recommended textbooks (not required)

1. Davis, George C., and Elena L. Serrano. *Food and Nutrition Economics: Fundamentals for Health Sciences*. Oxford University Press, 2016.
2. Neff R, ed. *Introduction to the Food System. Public Health, Environment, and Equity*. The Johns Hopkins Center for a Livable Future. San Francisco, CA: Jossey-Bass, Wiley & Sons, 2014.
3. Folland, Goodmand, and Stano. *The Economics of Health and Health Care* Pearson Prentice Hall Press. ISBN: 0-13-227942-8.
4. Banerjee, A.V. & Duflo, E. (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. Public Affairs, Perseus Book Group, Philadelphia, PA.

Fun Reading:

- Wansink, B. (2007). *Mindless eating: Why we eat more than we think*. Bantam.
- Pollan, M. (2008). *In defense of food: An eater's manifesto*. Penguin.
- Gilbert, E. (2009). *Eat Pray Love: One Woman's Search for Everything*. Bloomsbury Publishing
- Kristof, N. D., & WuDunn, S. (2010). *Half the sky: Turning oppression into opportunity for women worldwide*. Vintage Books USA.

Supplemental required readings will be provided to enrolled students.

Grading

According to the UA instructions for reporting final grades, they generally will reflect the following:

- A – Outstanding achievement (90% and above)
- B – Good achievement (80% - 89.99%)
- C – Average achievement (70% - 79.99%)
- D – Poor, but passing work (60% - 69.99%)
- F – Failure, given for unsatisfactory work (any grade below 60%)

Grading Guidelines for Graduate Students:

	Quantity	Points
Class Discussion	1	180
Quizzes (40 points each)	8	8*40=320
Midterm	1	200
Final Exam (200 points each)	1	300
Project-Presentation	1	200
Project-Final Draft	1	300
Total		1,500

Assignments and Exams

Class Participation:

Each student/team is expected to lead a class discussion. The person/team in charge will be assigned a paper to read and critique. He/she is expected to lead a class discussion for approximately 45 minutes including a 10-minute overview of the paper. I will evaluate his/her performance based on the relatedness to class materials, critical thinking, and the ability to generate meaningful class discussion.

Quizzes:

Eight (8) quizzes will be given throughout the semester and will be unannounced. Quizzes are only available to students in attendance on the day of the quiz. Quiz questions will be based on text, class material, and assigned readings.

Exams:

Make up exams will not be permitted without prior arrangement due to an excused absence.

Project

Graduate students are required to complete an independent project by the end of the course. The project can be chosen from one the following areas with a related topic of interest: policy, economics analysis, marketing, or development. The project can be either qualitative or quantitative with no page limits. Please apply scientific writing and format according to an academic journal in your field.

Presentation

A presentation of 15 minutes is required at the end of the course to disseminate ideas and preliminary findings. Dress code is business attire or business casual. The aim is to prepare students for future interview and academic meetings.

Final Project

A manuscript of your project is required in print or an electronic version on the due date. The manuscript should follow academic writing, be original work, and have publication potential. The aim of a writing project is to prepare students for publication or report writing.

Additional Information and Resources

Devices Policy:

Please turn off or silence devices during class. Let us do our best not to let the notifications on our devices become a distraction for us in class.

Disabilities:

If you need to request reasonable accommodations for this class due to a disability, you must first register with the Center for Educational Access (CEA). The CEA will notify the instructor, but the student still has an obligation to meet with the instructor to plan the procedures required for adequate accommodation.

Academic Dishonesty:

"Each University of Arkansas student is required to be familiar with and abide by the University's 'Academic Integrity Policy' which may be found at <http://provost.uark.edu/> Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor."

Inclement Weather:

If the University is open, we will have class. As the instructor, I reserve the right to cancel class due to inclement weather. Students will be notified by email and Blackboard if this is the case. Please use your best judgment before getting on the road. See UA Inclement Weather Policy at <http://emergency.uark.edu/inclement-weather/index.php>

Emergency Procedures:

Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at <http://emergency.uark.edu>

Severe Weather (Tornado Warning):

- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):

If you hear shots or see weapons:

1. If you are outside and hear gunshots immediately seek shelter in another building or escape to a safe area away from the sounds of the gunshots. Call 911 immediately.
2. Trust your instincts! Lock the doors; cover door windows if possible. Set your cell phone on vibrate or silent.
3. If you are present where a shooter is active:
 - Avoid: Leave the area immediately. If necessary, break windows or glass to get out of the area. Run in the opposite direction of the disturbance or shots, cover your head with books or other items for protection. DO NOT stop running until you are in a safe area. If police officers are in the area, listen and comply with all of their commands. Raise your hands or keep them in plain sight so you are not perceived as a threat to the police.
 - Deny: If you choose to stay in your room. Do not leave until instructed to do so by a police officer. LOCK YOUR DOOR! Stay away from and below any window. Position furniture or other items in front of the door. Turn off the lights and call 911.
 - Defend: If the first two options do not work, defend yourself and those around you. Utilize any objects available to you to distract or interrupt the actions of the shooter.
4. Stay low to the ground and away from windows and doors.
5. Remain in a safe location until you receive instructions from police.
6. As soon as possible, call University Police at 575-2222 or dial 911
7. Give the police dispatcher as many details as possible about your location, the location of the individual with the weapon, or the location of the gunshots.
8. Include the number of persons involved, description of armed subject(s), weapons displayed, locations of victims, direction of travel, threats made, etc.
9. Remain calm!

Course Outline, Readings, Assignments and Exams (*Dates/materials are subject to change*)

Date & Week	Topic	Reading & Assignment
Part I: Food, Nutrition, and Food System		
Week 1	<i>Introduction</i>	
	Course overview and expectations of the instructor and students	Read course syllabus
	Introduction to U.S. Food and Nutrition Policy	Supplemental Reading
Week 2	<i>Policy Concepts and Issues</i>	
	U.S. Food and Nutrition Policy Development	Neff Chap 1 &8, Davis Part 1
	National Nutrition Monitoring Act and U.S. Farm Bill	Supplemental Reading
Week 3	<i>U.S. Food and Nutrition Policy Implementation</i>	
	Food Safety, Nutrition Facts panel, Food labeling,	Neff Chap5,6& 13, Banerjee chap 3
	Health disparities, Health equity, and Food Well-being	Supplemental Reading
Week 4	<i>U.S. Food and Nutrition Policy Monitoring and Evaluation</i>	
	Concepts related to poverty, income inequality, food insecurity, and health disparities	Neff Chap 15
	National Health and Nutrition Examination Surveys (NHANES)	Supplemental Reading
Part 2: Tools to evaluate food, nutrition, and health: economics, marketing, and statistics		
Week 5	<i>Micro Review</i>	
	Microeconomic Tools for Health Economics	Folland Chap 2, Davis Chaps 3-5
	Production of Health	Supplemental Reading
Week 6	<i>Statistical tools</i>	
	Reading statistics results	Folland Chap 3
	Available datasets for public health research	Supplemental Reading
Week 7	<i>Economic Efficiency and Equity</i>	
	Cost Benefit Analysis	Folland Chap 4
		Supplemental Reading

Week 8	<i>Marketing Tools</i>	
	Consumer Choice Theory	Folland Chaps 7,9 & 24, Davis Chaps 6,7,8 &9
	Consumer behaviors	Supplemental Reading
Week 9	Review and Midterm	
Part 3: Health		
Week 10	<i>The demand and supply for health insurance</i>	
	The demand for health insurance in the US	Folland Chap 8 &11
	Market power for health providers	Supplemental Reading
Week 11	<i>Health care issues, Medicaid & Medicare</i>	
	Health care reform	Banerjee chaps 4 &5
		Supplemental Reading
Week 12	<i>Moral Hazard and Adverse Selection</i>	
	Managed Care	Folland 10
		Supplemental Reading
Part 4: The Bigger Picture		
Week 13	<i>Government's Role in Health Care</i>	Folland 19 &21
	Government Intervention and Health Care Markets	Supplemental Reading
	Social Insurance	
Week 14	<i>Global Food, Nutrition, and Health Policies, Institutions and Structures</i>	
	Sustainable Development	Supplemental Reading
	A comparison of health care system across countries	
Week 15	<i>Economic well-being, poverty, and food insecurity</i>	
	Health issues in developing countries	
	Effect of Health on Economic Growth	Supplemental Reading
Week 16	Graduate Project Presentation	
Final Review and Final Exam		

Supplemental Reading List (tentative)

Week 1: Introduction

1. Brownson, Ross C., et al. "Researchers and policymakers: travelers in parallel universes." *American journal of preventive medicine* 30.2 (2006): 164-172.
2. Maxwell, Simon, and Rachel Slater. "Food policy old and new." *Development policy review* 21.5-6 (2003): 531-553.
3. Ratner RK, Riis J. Communicating science-based recommendations with memorable and actionable guidelines. *Proc Natl Acad Sci U S A*. 2014 Sep 16;111 Suppl 4:13634–41.

Week 2: Policy Concepts and Issues

1. O'Connor A. Coca-Cola funds scientists who shift blame for obesity away from bad diets ([Links to an external site.](#)). *The New York Times*. August 9, 2015.
2. Rahavi, Elizabeth, et al. "Updating the Dietary Guidelines for Americans: Status and Looking Ahead." *Journal of the Academy of Nutrition and Dietetics* 115.2 (2015): 180-182.
3. Slavin, Joanne L. "The challenges of nutrition policymaking." *Nutrition journal* 14.1 (2015): 1.

Week 3: U.S. Food and Nutrition Policy Implementation

1. Food and Nutrition Service. U.S. Department of Agriculture. Programs and Services. 2014.
<http://www.fns.usda.gov/programs-and-services> ([Links to an external site.](#))
2. Pomeranz JL, Chiqui JF. The Supplemental Nutrition Assistance Program: analysis of program administration and food law definitions. *Am J Prev Med*. 2015;49(3):428–36.

3. Finley, John Weldon, et al. "Launching a new food product or dietary supplement in the United States: industrial, regulatory, and nutritional considerations." *Annual review of nutrition* 34 (2014): 421-447.
4. Kessler DA. Toward more comprehensive food labeling. *New Eng J Med*. 2014;371(3):193–5.

Week 4: U.S. Food and Nutrition Policy Monitoring and Evaluation

1. Slining MM, Yoon EF, Davis J, Hollingsworth B, Miles D, Ng SW. An approach to monitor food and nutrition from "factory to fork". *J Acad Nutr Diet*. 2015;115(1):40–9.
2. Miller PE, Reedy J, Kirkpatrick SI, Krebs-Smith SM. The United States food supply is not consistent with dietary guidance: evidence from an evaluation using the Healthy Eating Index-2010. *J Acad Nutr Diet*. 2015;115(1):95–100.
3. Kraak VI, Story M, Wartella EA, Ginter J. Industry progress to market a healthful diet to American children and adolescents. *Am J Prev Med*. 2011;41(3):322–33.

Week 5: Micro Review

1. Mehrotra, Ateev, Adams Dudley, and Harold Luft, 2003. "What's Behind the Health Expenditure Trend," *Annual Review of Public Health*.
2. Reinhardt, U. A production function for physician services. *The Review of Economics and Statistics*, 54(1):55–65, February 1972.
3. Thomsen, Michael R., et al. "The Effect of Food Deserts on the Body Mass Index of Elementary Schoolchildren." *American Journal of Agricultural Economics* 98.1 (2016): 1-18.

Week 6: Statistical tools

1. Fang, Di, Jenny Chong, and Jeffrey R. Wilson. "Predicted probabilities' relationship to inclusion probabilities." *American journal of public health* 105.5 (2015): 837-839.

2. Schaefer, David R., and Sandra D. Simpkins. "Using social network analysis to clarify the role of obesity in selection of adolescent friends." *American journal of public health* 104.7 (2014): 1223-1229.
3. Christakis, Nicholas A., and James H. Fowler. "The spread of obesity in a large social network over 32 years." *New England journal of medicine* 357.4 (2007): 370-379.

Week 7: Economic Efficiency and Equity

1. Cutler, D. M *et al.*, „The Value of Medical Spending in the U.S. 1960-2000, The New England Journal of Medicine, 335(9): 920-27.
2. Lee, C. P., “An Empirical Estimate of the Value of Life: Updating the Renal Dialysis cost Effectiveness Standard,” *Value in health* 12(1) 2009:80-87.
3. Pearson, S.D. et al., “Assessing the Comparative Effectiveness of a Diagnostic Technology: CT Colonography,” *Health Affairs*, 27, no.6 (2008):1503-1514.
4. Antonuccio, D. et al, “A Cost Effectiveness Analysis of Cognitive Behavior Therapy and Fluoxetine (Prozac) in the Treatment of Depression,” *Behavior Therapy*, 28(2) (1997): 187-210.

Week 8: Marketing Tools

1. Fuchs, V.R., 1982. Time preference and health: An exploratory study. In: Fuchs, V.R., Editor, 1982. *Economic aspects of health*, University of Chicago Press, Chicago, pp. 93–120.
2. Nayga, Rodolfo M., Daria Lipinski, and Nitin Savur. "Consumers' use of nutritional labels while food shopping and at home." *Journal of Consumer Affairs* 32.1 (1998): 106-120.
3. Grebitus, Carola, and Carolin Seitz. "Relationship between Attention and Choice." *Agricultural and Applied Economics Association's 2014 AAEA Annual Meeting, Minneapolis, MN*. 2014.

Week 9: Review and Midterm

Week 10: The demand and supply for health insurance

1. The Rand Corporation, "The Health Insurance Experiment," Research Highlights, http://www.rand.org/content/dam/rand/pubs/research_briefs/2006/RAND_RB9174.pdf
2. Pauly, Mark V. "Market power, monopsony, and health insurance markets." *Journal of Health Economics* 7.2 (1988): 111-128.
3. Gruber, Jonathan, and Michael Lettau. "How elastic is the firm's demand for health insurance?." *Journal of Public Economics* 88.7 (2004): 1273-1293.

Week 11: Health care issues, Medicaid & Medicare

1. Wagstaff, Adam 1986. "The Demand for Health: Theory and Applications," *Journal of Epidemiology and Community Health* 40(1), 1-11.
2. Manning, Willard G., et al. 1987. "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, 77(3), 251-277
3. Office of the Surgeon General (US. "Medicare and Medicaid." (2005). <https://www.ncbi.nlm.nih.gov/books/NBK44664/>

Week 12: Moral Hazard and Adverse Selection

1. Cutler, David M., Mark McClellan, and Joseph P Newhouse. 2000. "How Does Managed Care Do It?," *Rand Journal of Economics*, 31(3), 226-248.
2. Newhouse, Joseph, 2004. "Consumer-directed health plans and the RAND Health Insurance Experiment," *Health Affairs* 23(6),107-113.
3. Miller RH, Luft HS, 2002. "HMO plan performance update: an analysis of the literature, 1997-2001," *Health Affairs* 21(4), 63-86.
4. Pauly, Mark V. , 1968, "The Economics of Moral Hazard: Comment", *The American Economic Review* 58(3), Part 1, 531-537.

Week 13: Government's Role in Health Care

1. Sagers, Chris. "Much Ado About Probably Pretty Little: Mccarran-Ferguson Repeal in the Pending Health Reform Legislation." *Yale Law & Policy Review* 28 (2010): 10-184.
2. Ensor, Tim. "Informal payments for health care in transition economies." *Social science & medicine* 58.2 (2004): 237-246.
3. Moene, Karl Ove, and Michael Wallerstein. "Inequality, social insurance, and redistribution." *American Political Science Review* (2001): 859-874.

Week 14: Global Food, Nutrition, and Health Policies, Institutions and Structures

1. Burkle et al., Kahn et al., and Schuftan et al. A manifesto for planetary health. *Lancet*. 2014;383(9920):1459-60. <http://www.thelancet.com/pdfs/journals/lancet/PIIS0140673614607108.pdf>
2. Griggs D, Stafford-Smith M, Gaffney O et al Policy: Sustainable development goals for people and planet. *Nature*. 2013;495(7441):305-7. <http://dx.doi.org/10.1038/495305a>
3. United Nations. Highlights of the UN *Sustainable Development Summit*. September 2015. <http://www.un.org/sustainabledevelopment/blog/2015/09/highlights-of-the-un-sustainable-development-summit/>
4. Brinsden H, Lang T. Reflecting on the ICN2: was it a game changer? *Archives Public Health*. 2015;73:42. <http://www.archpublichealth.com/content/73/1/42>

Week 15: Economic well-being, poverty, and food insecurity

1. Canning, David. 2006. "The Economics of HIV/AIDS in Low-Income Countries: The Case for Prevention," *Journal of Economic Perspectives*, 20 (3), 121-142.
2. Bloom, David, David Canning and Jaypee Sevilla. November 2001. "The Effect of Health on Economic Growth: Theory and Evidence", NBER Working Paper 8587.
3. Alviola, Pedro A., Rodolfo M. Nayga, and Michael Thomsen. "Food deserts and childhood obesity." *Applied Economic Perspectives and Policy* 35.1 (2013): 106-124.

4. Popkin, Barry M., Linda S. Adair, and Shu Wen Ng. "Global nutrition transition and the pandemic of obesity in developing countries." *Nutrition reviews* 70.1 (2012): 3-21.
5. Wheeler, Tim, and Joachim Von Braun. "Climate change impacts on global food security." *Science* 341.6145 (2013): 508-513.

Week 16: Graduate Project Presentation

Week 17: Final Exam