ANTH 4953: Anthropology of Human Diet and Nutrition

Instructor: Dr. Christina Warinner

Course Meets: M and W, 1:30-2:45 pm in Kaufman Hall 231 Office Hours: Dale Hall Tower 510, M 3-5 pm and by appointment

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Course D2L Website: http://learn.ou.edu/d21/le/content/2155059/Home

Course Summary:

This course surveys the evolution of human diet, from the foods of our earliest ancestors to the contents of today's supermarkets. We'll cover the definition of food, human nutritional requirements, major dietary transitions and food innovations in human history, the roots of world cuisine, the modern food industry, and current and future food challenges.

Course Structure:

The course is divided into three parts that cover different aspects of human diet and nutrition:

Part 1: The Biology of Food and Digestion

Part 1 of the course will focus on the biology basics of food, digestion, and nutrition. This part of the course will consist mostly of lectures and will be assessed with a **Midterm Exam**.

Part 2: The Evolution and Diversity of Human Diets

Part 2 of the course explores *what* we know about the evolution and history of human diets and *how* we know it. This part of the course will consist of both lectures and in-class discussions. You will use the information and concepts covered in this part of the course to investigate a specific food and give an inclass **Food Project** presentation.

Part 3: Food Challenges and Controversies Today

Part 3 of the course focuses on major food challenges and controversies today. Building on what you learned in parts 1 and 2 of the course, you will engage in thoughtful in-class discussions on controversial and/or complex topics relating to industrial agriculture, GMOs, government nutritional policies, dietary advice and guidelines, and other important topics at the forefront of domestic and international debates about the future of food. You will research one of these current food challenges/controversies in detail and write a final **Research Paper** on the topic.

At the end of the course there will be a **Final Exam** that is cumulative and covers the major topics and themes of the course.

Course Goals and Outcomes:

My goal is to equip you with the knowledge, tools, and critical thinking skills necessary to understand and participate in global debates surrounding human nutritional health and the future of food. At the end of this course, you will be able to:

- Define food and explain how the human body digests and uses food
- Describe what evidence anthropologists use to reconstruct past human diets
- Evaluate current anthropological theories about the origins and evolution of human diets
- Discuss the process of domestication and the diversity of world cuisines
- Identify major food challenges and food controversies today and critically evaluate the contrasting viewpoints regarding the both the problems and the solutions.

Course Texts and Media:

Required Texts Available at OU Bookstore and Other Booksellers (\square):

- 1. Eating Culture, by Gillian Crowther, University of Toronto Press, 2014
- 2. On Food and Cooking, Harold McGee, Scribner, 2004
- 3. Consider the Fork, by Bee Wilson, Basic Books, 2013

Additional Required and Optional Texts and Media:

- 1. PDFs of selected scientific articles and book chapters () are available on D2L.
- 2. Links for video (♠), audio (♠), and web-interactive (♠) media are available on D2L.

Class Schedule:

Part 1:	Part 1: The Biology of Food and Digestion					
Date	Lecture Topic	Required Reading and Media	Optional Reading			
1/12	Introduction and Overview: What is Food?	Crowther Chapter 1; Strauss 2006	Davis 1928, 1933, 1939			
1/14	Malnutrition In Class: The Weight of the Nation	Roberts Chapter 16; Ahmad and Crandall 2010				
1/19	Martin Luther King Day	No Class				
1/21	Life and the Carbon Cycle	Langenheim Chapters 2, 5, 6, & 7				
1/26	Basic Food Types	McGee p. 118-144, 166-169, 243-273; Langenheim Chapters 13 & 18	Harwood 1971; Anderson 1987			
1/28	Basic Chemistry	Roberts Chapter 2; Biochemistry Handout				
2/2	Fats and Proteins	McGee Chapter 15 and Appendix; Food Biomolecules Handout				
2/4	Carbohydrates Food Project Groups Assigned	Smolin Chapter 7				
2/9	Vitamins and Digestion	Campbell Chapter 21; Roberts Chapter 11; Smolin Chapter 3				
	Final Paper Topics Due	_				
2/11	Gut Microbiome and Midterm Review	Walter and Ley 2011; Bajzer and Seeley 2006; CMAJ 2013 ● Infant gut video	Dominguez et al. 2010; Turnbaugh et al. 2006			
2/16	In-Class Midterm Exam					

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Part 2:	The Evolution and Diversity	of Human Diets	
Date	Topic	Required Reading and Media	Optional Reading
2/18	Human Subsistence	Crowther Chapter 2;	
		Langenheim Chapter 3	
2/23	Primate Diets	Hohmann 2009; Milton 2000a	
		Groups 1-3: Surridge et al. 2003	
		Groups 4-5: Breslin 2013	
2/25	Diets of Modern Foragers	Lee 1968; Murdoch 1892;	
	_	O'Dea 1991	
3/2	The Paleo Diet	Milton 2000b; Cordain 2000	
3/4	Hominin Diets and	Alemseged and Bobe 2009;	McPherron et al.
	Behaviors	Sponheimer 2013; Ponzer 2012	2010; Sponheimer et al. 2013
	Final Paper Bibliography	↑ CAS Human Odyssey online	al. 2013
	Due	interactive map; Smithsonian	
	Due	Human Evolution online	
		interactive timeline	
		CAS Zeray Alemseged video	
		clip	
3/9	Becoming Human	Adler 2013; Milton 1999;	Aiello and Wheeler
	3	Wrangham et al. 2013	1995; Roebroeks and
			Villa 2011; Henry et
		Catching Fire: How Cooking	al. 2011
		Made us Human video clip	
		-	
3/11	Recent Human Dietary	Curry 2013; Ye and Gu 2011	Tishkoff 2007;
	Adaptations	-	Perry et al. 2007
3/16	Spring Break – no class		
3/18	Spring Break – no class		
3/23	Origins of Agriculture	Larson et al. 2014	
	Food Project Topic and		
	Bibliography Due		
3/25	Cooking and Cuisine	☐ Wilson 2013 Chapters 1, 2, 6	
	In class: Lucy Worsley's		
	If Walls Could Talk, Part 4:		
	The Kitchen		
3/30	Food Project Class		
	Presentation		

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Part 3:	Food Challenges and Contro		
Date	Торіс	Required Reading and Media	Optional Reading
4/1	Food Industrialization	Crowther Chapters 3 and 8	
4/6	Silent Spring	All: Carson 1962 p. 35-64; Hawkins 1994 Groups 1-3: White-Stevens 1962 Groups 4 & 5: Diamond 1963	Hallmann et al. 2014; Carson 1962, p. 64-99
1/0		■ Science Friday: Concerns rise over pesticide use, birds, bees	
4/8	Green Revolution	All: Borlaug 2000; Stokstad 2007 Groups 1-3: Tillman et al. 2002 Groups 4 & 5: Foley et al. 2005	
4/13	GMOs and Golden Rice	Clark Chapters 15; Potrykus 2001; Enserink 2008; Pollan 2001	Clark Chapter 10
4/15	Global Nutrition and Sanitation Guest lecture by Prof. Robert Dreibelbis	Spears et al. 2013; Schmidt 2014	
	Final Paper Due		
4/20	USDA Nutritional Guidelines and Labeling	Perelman 2011; Nestle 2013 Afterword; Nixon 2011	
4/22	NIH Women's Health Initiative, 1991-2006	All: Tinker 1995; Michels 2006 Group 1: WHI 2002 Group 2: Howard et al. 2006a Group 3: Howard et al. 2006b Group 4: Beresford et al. 2006 Group 5: Prentice et al. 2006	
		Complete the NIH DHQ-II survey and bring results to class	
4/27	Nutritionism	Pollan 2007	
4/29	Imitation Foods	☐ Wilson 2008 Chapter 5 Supersizers GoSeventies	
	Final Paper Revisions Due		
5/7	Final Exam		

Grading System:

Your grade is based on the 1000 points available for the course, plus the 25 possible extra credit points. 900 points and above = A, 800 points and above = B, etc. A curve may be applied.

- 1. Participation, 50 points
- 2. Pop Quizzes, 100 points
- 3. Biology of Food and Digestion Exam, 250 points
- 4. Food Project, 100 points
- 5. Final Paper, 250 points
- 6. Final Exam, 250 points
- 7. Extra Credit, up to 25 points

Participation (50 points)

It is important to come to class. Although most of the course material is available online, additional important information will be announced and discussed only in class. Also we will have several important class discussions and informal debates, especially in Part 3 of the course. Attendance and active participation is expected for full participation credit.

- **Missing class**: If you can't avoid missing a class, please let me know in advance and provide documentation, if available. Excused absences may include illness, university sanctioned travel, documented emergencies, etc. Contacting me in advance does not automatically excuse your absence
- **Negative participation**: In addition to positive participation points, you can also earn negative participation points. This refers to anything that is disruptive to the instructor or the other students during class time. Some examples of this would include talking, rudeness to your fellow students, text messaging, inappropriate use of laptop computers, and/or repeatedly coming to class late.
- Religious holidays: It is University policy to excuse the absences of students that result from religious observances and to provide, without penalty, for the rescheduling of examinations and additional required class work that may fall on religious holidays. Please talk with me at least 2 weeks prior to the assignment due date in order for accommodations to be made.

Pop Quizzes (100 points)

During the semester, five pop quizzes will be given at the beginning of class. The quiz will cover information contained in the assigned reading. At the end of the semester, you may drop your lowest pop quiz score. The remaining four quiz scores will count for 100 points of your grade (25 points each).

Biology of Food and Digestion Exam (250 points)

This exam takes place on 2/16/2015 and covers all material (lectures, films, readings) covered in Part 1 of the class. The exam review session will be held during the second half of class on 2/11/2015. The exam will contain multiple choice, T/F, fill-in-the-blank, short answer, and essay questions.

Food Project (100 points)

The food project is your opportunity to flex your creativity and try something out of your comfort zone. You will work in assigned groups, and for this project you are required to go the Asian supermarket Super Cao Nguyen (2668 N Military Ave, Oklahoma City, OK 73106). Your project is to find a basic food you have NEVER eaten before, research its origins and history, and prepare a dish using it as an ingredient. You will then present a 5-7 minute talk about your food. Be creative! Your food topic and bibliography is due 3/18/2015 (25 points) and the presentation (75 points) will be held in class on 3/30/2015. I will provide detailed information about project requirements in a separate handout to be provided in class.

Final Research Paper (250 points)

You will complete a semester-long research paper due on 4/15/2015. For this paper you will research a current *food challenge* or *food controversy*. You may select any of the topics discussed the course (or another topic of your choice), and you are encouraged to use the class readings as inspiration and references. You will write a 3,000-word (approx. 10-page) research paper about the food challenge or controversy of your choice. I will return your paper with comments on 4/22/2015. You may accept the grade as is or revise the paper and resubmit by 4/29/2015. I will provide detailed information about project requirements in a separate handout in class.

- Paper topics are due in class on 2/4/2015, and a bibliography with at least 15 scholarly references is due on 3/4/2015.
- The final paper is due in the course **D2L dropbox** on 4/15/2015.
- I will grade your paper and return it with comments on 4/22/2015. If you choose, you may revise the paper and resubmit it by 4/29/2015.
- For help with writing, please contact the Writing Center at 325-2936 (<u>www.ou.edu/writingcenter</u>) or meet with me during office hours.

Final Exam (250 points)

This exam takes place on 5/7/2015 at 8:00am and covers all material (lectures, films, readings) covered in the class. The exam review session will be held during the second half of class on 4/29/2015. The exam will contain multiple choice, T/F, fill-in-the-blank, short answer, and essay questions.

Extra Credit (25 points)

To reward students who regularly attend class and complete the readings, I will add your lowest quiz score to your final grade as extra credit (worth up to 25 points). For example, if your final grade is 880 points (B) and your lowest quiz score is 20/25, I will bump up your grade to 900 points (A). It pays to do the readings and come to class!

Additional Grading Information

Return of exams and assignments:

University guidelines indicate that instructors should give students the results of exams and assignments within 2 weeks. I will make every effort to post your grades within that time frame.

Late assignments and missed exams/presentations/quizzes

- Late assignments (topics, bibliographies, paper) are docked 10% for every day they are late.
- If you accidentally miss an exam/presentation/quiz, you cannot make it up.
- If you miss an exam/presentation/quiz because of a documented emergency or because of a **legitimate**, **documented schedule conflict** (e.g., mandatory participation in a university-sponsored event), you may be able to reschedule the exam/presentation/quiz.
- If possible, make arrangements ahead of time. Otherwise, **you must contact me the day of the exam/presentation/quiz, preferably before the scheduled class time**, to let me know what happened and to ask for permission to make up the exam/presentation/quiz. The best ways to contact me are by email and via a message left with the anthropology office at 325-3261. You can also try my office phone at 325-1943 or 325-2946.
- If you miss an exam/presentation/quiz due to illness, **get a doctor's note**.
- Make-up exams/presentations/quizzes may be in a different format from the regular assignment (e.g., make-up exam may be all essays, make-up presentation may be a paper).

Final Exam

• The final exam cannot be made up except under extraordinary circumstances. Official university make-up policies for the final exam can be found here: https://www.ou.edu/content/enrollment/final_exams.html

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Grade review

Occasionally professors make errors in grading. If you feel your test or paper has been graded unfairly, you are welcome to submit it for grading review. If you do this, however, be aware that your **entire exam/paper** (not just one or two questions) will subsequently be reviewed for grading errors, including errors that may have originally been in your favor.

Additional Course Policies:

Email and Office Hours

I am always happy to respond to student questions by email and I will try to respond within 48 hours. During certain times in the semester, however, I may not be able to keep up with the volume of emails in my inbox. If you have a complex issue or question, I would prefer for you to come to my office hours or make an appointment to meet with me instead of sending lengthy emails. If you send an email outside of normal business hours (e.g., nights and weekends), do not expect an immediate response.

Cell phones, laptops, tablets, etc.

Minimize distractions for your classmates. If you want to use your device to take notes: 1) <u>turn OFF the sound</u> and 2) <u>DO NOT</u> web surf, monitor Facebook, respond to email, send text messages, or do anything <u>else that will distract those around you</u>. Repeat violators of these rules will be asked to leave their computers turned off during class and may lose participation points.

Special needs

Any student in this course who has a disability that may prevent him/her from fully demonstrating his/her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities. Formal requests for accommodation are made through the Office of Disability Services (Goddard Health Center, Room 166, 325-3852).

Academic integrity and misconduct

<u>DO NOT CHEAT OR PLAGIARIZE</u>. If you are unclear about what either of these things mean, please see me and I will be happy to clarify, or go to: http://integrity.ou.edu.

- Cheating includes the use of unauthorized materials on exams and assignments, copying someone else's answers or work, getting someone else to do your work for you, and/or submitting the same work to different classes.
- Plagiarism means presenting someone else's words or ideas as your own. In your written work, make sure that you cite all sources appropriately in the AJPA citation style with a bibliography at the end in your essays (http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1096-8644/homepage/ForAuthors.html#6). Failure to do so may be regarded as plagiarism, and you may fail the assignment as a result.

Academic misconduct on course work may result in a failing grade for this class. It is the responsibility of each student to be familiar with the definitions, policies, and procedures concerning academic misconduct. The Academic Misconduct Code is printed with the Student code and is available on the web at http://www.ou.edu/provost.

Syllabus changes: I reserve the right to make changes to the course syllabus and reading assignments over the course of the semester should the need arise. These changes should not affect the workload or the point distribution.