



Global Food Systems | Fall 2017 - PLSC 303 - 3 credits

Instructor: Kate Tully ktully@umd.edu | 2108 Plant Sciences Building | 301-405-1469
Office Hours: Tues & Thurs 2-3pm and by appointment

Meeting Times: Tues/Thurs 12:30-1:45pm PLS 1164

Goal: To give students a holistic understanding of the global food system. Students will integrate concepts across a variety of disciplines and be equipped to access, organize, and apply knowledge of (1) the core elements of food production systems, (2) human malnutrition, and (3) global food security and food policy.

Course Description:

How do we balance the often competing objectives of producing food, preserving the environment, and promoting human well-being?

This course begins with a tour of the types and distributions of crops across the globe, then we will discuss the history of the Green Revolution and agricultural intensification and its effects on climate change and water resources. We will discuss the human dimensions of the food system through an examination of famine, food security, animal agriculture, the global trade of calories. We will end the term with a series of case studies on biotechnology, organic agriculture, food waste, and the US Farm Bill.

Learning Outcomes

Scientific Literacy. Students will gain foundational knowledge in how and why certain crops are well- or mal-adapted to geographical regions (in terms of soils, water, and nutrients). Students will learn about different types of farming systems found around the world. From this foundation, students will be able to proficiently discuss the complex balance between people, food, and nature and understand what makes a sustainable agroecological system.

Science and Society. Students will study and discuss the specific effects of monocultures, crop diversity, food safety and security, genetically modified crops, organic agriculture, and the carbon footprint generated by specialty crop production. The effects of agricultural trade on natural resources and the environment will also be discussed.

Global Citizenship. Students will gain an understanding of food security issues at home and abroad. We will discuss the causes and consequences of over- and under-nutrition in the context of the globalization of food markets.

Required Readings, Textbooks & Technology

Weekly reading will pair textbook chapters with papers from the scientific literature and short films. Assigned pages and links to papers and films will be posted on the course [ELMS website](#) in the form of pdf files or web links. Students are responsible for printing or downloading the reading materials. Note taking during lectures is strongly recommended.

Required text

Joel K. Bourne, Jr. *The End of Plenty: The race to feed a crowded world* (2015) WW Norton & Company
ISBN-13: 978-0393352962

Students will need access to a computer and internet connection. The Food Systems Film Festival assignment will require the use of video cameras, microphones, and video editing software. All of which is available for free to students at [Hornbake library](#) or through [Terpware](#).

Course Attendance Policies

Class attendance and participation will be graded as part of this course. This class is meant to be interactive and encourage discussion. Courteously asking and answering questions of your instructor and your peers is highly encouraged. Excessive absences will affect your final grade. If you must miss a class because of illness, religious observance, participation in university activities at the request of university authorities, or compelling circumstances beyond your control, request an excuse in writing and submit appropriate documentation 24 hours in advance (except in extreme circumstances).

Being present is not only physical. If your body is in the room but your mind has wandered, you'll have to do extra work to catch up. Save time by focusing on the task at hand. Switch electronic devices off. Avoid distracting others by walking in and out of the room.

Religious Observances

The University System of Maryland policy on religious observances states that students should not be penalized in any way for participation in religious observances and that, whenever feasible, they are allowed to makeup academic assignments that are missed due to such absences. However, the student must personally hand the instructor a written notification of the projected absence within two weeks of the start of the semester. The request should not include travel time. Instructors should take the validity of these requests at face value. In addition, due to the inconvenience that would be caused as a result of the large number of other students who participate in particular religious observances, tests and due dates of other significant assessment *will* not be scheduled for the dates listed below.

Passover 10-12 April, 2017

Good Friday 14 April, 2017

It is the student's responsibility to inform the instructor of any intended absences for religious observances *in advance* and that prior notification is especially important in connection with examinations, since failure to reschedule a examination before the conclusion of the examination period may result in loss of credits during the semester.

Disability Support Services

The University of Maryland is committed to making reasonable accommodations to individuals with disabilities that have been documented by Disability Support Services (0126 Shoemaker Hall). Any student seeking accommodations must register with Disability Support Services. If you wish to discuss academic accommodations for this class, please contact Dr. Tully as soon as possible. To make meaningful accommodations this must be done prior to the first exam.

Exam Policies

Missed exams. Missed exams cannot be made up until the end of the semester. Students who have missed Exam 1 and/or 2 will take their make-up exam during the final exam period. Students will be given an hour to complete each make-up exam after turning in their completed final.

Exam grade disputes. Any dispute(s) about a grade on an exam must be given *in writing, within one week of the time the exam was handed back.* The exam will be reviewed by the professor and all appropriate grading changes will be made—be they positive or negative for the total exam grade.

Discussion materials represent a major component of this course. Consequently, information in discussion will be covered in the examinations.

Early Warning Grades will be based on your grade on EXAM 1.

Final Project. This class does not have a final exam. You will be developing and shooting a 3-5 min film on a topic related to Global Food Systems. Films are due on 8 May by midnight and will be viewed in class on May 9 and 11, 2017. A detailed description of this assignment can be found on the course website.

Assignments and Grading

Component	Points	%
Class participation	60	9
Discussion/Activity Leadership	25	4
Exam 1	100	16
Exam 2	100	16
Quizzes and Assignments	185	29
Food Systems Film	175	27
Total	645	100

Integrity, Cheating and Plagiarism

Academic integrity is fundamental to learning and scholarship. At its simplest, this means that the work you submit must be your own unless collaboration is specifically allowed, that you express yourself in your own words unless you are quoting, and that you properly acknowledge and cite the ideas, information, and other work that you used or that contributed to your understanding. As we engage in research, we will discuss how to correctly acknowledge others' work to avoid misuse of sources. The University of Maryland Library page [Academic Integrity and You](#) contains resources on avoiding plagiarism and other pitfalls in research and writing. The [University of Maryland Code of Academic Integrity](#) provides fuller discussion of academic integrity and clear definitions of plagiarism, misuse of sources, and cheating.

Communication outside of the classroom

Office Hours Tues & Thurs 2-3pm and by appointment

My door is open for you. Please stop by during office hours to ask questions, clarify ideas, better understand assignments, or talk about how class is going for you. Email to schedule an appointment. Your study group is also invited to meet with me. Your success in the class is important to me.

Email: Dr. Kate Tully ktully@umd.edu

You can usually expect responses to email within 1-2 business days, during normal work hours (approximately 9am – 5pm). Before emailing, please make sure that the answer to your question isn't in the syllabus, the text of an assignment, or an email sent to the whole class.

Use of Professional Communication in Electronic Messages

In this course, we'll practice professional communication, which may differ from how you usually use email. When you begin a conversation, address the recipient (e.g. "Dear Dr. So-and-so," "Hello Ms. Whosey-Whatsit," and so forth). In the body of your message, use complete sentences, check spelling, and maintain a professional tone. Use a closing phrase (e.g. "Thank you," or "Best regards,") and sign your name. You may already be familiar with this format; if not, you may be amazed how effective this style is for respectfully asking people to be attentive to your questions and requests.

Phone Dr. Kate Tully: (301) 405-1469

You are welcome to call with questions or concerns; please leave a voicemail clearly stating your name, and if you would like a call back or an email. You can expect a similar response time for phone calls as for email: usually within 1-2 business days, during normal working hours (approximately 9am – 5pm).

Course Schedule

Schedule is subject to change due to weather or other unforeseen events. The most updated course calendar can be found [online](#).

Day	Date	Lecture Topic	Assignments due
Thurs	26-Jan-2017	Introduction to the course	
Tues	31-Jan-2017	Crops, calories, farming systems	
Thurs	2-Feb-2017	Timeline of global famines	
Tues	7-Feb-2017	Agriculture and climate change	
Thurs	9-Feb-2017	History of the Green Revolution	Commentary 1
Tues	14-Feb-2017	Ag intensification and changing nutrient cycles	
Thurs	16-Feb-2017	Consequences of GR & Exam Review	
Tues	21-Feb-2017	Midterm I	
Thurs	23-Feb-2017	Introduction to Storyboarding	
Tues	28-Feb-2017	Animals in Agriculture	
Thurs	2-Mar-2017	Obstacles to feeding 9.5 billion	Film concept
Tues	7-Mar-2017	Intro to film editing workshop	
Thurs	9-Mar-2017	Movement of calories and diets	Story boards
Tues	14-Mar-2017	Water resources - Quantity	
Thurs	16-Mar-2017	Farming systems and water	Commentary 2
Tues	21-Mar-2017	Spring Break	
Thurs	23-Mar-2017	Spring Break	
Tues	28-Mar-2017	Food, Fuel and Profit	Film footage draft
Thurs	30-Mar-2017	Malawi, human nutrition, food security	
Tues	4-Apr-2017	Midterm II	
Thurs	6-Apr-2017	Hunger in the US: A place at the table - movie	
Tues	11-Apr-2017	Aquaculture	Film reflection 1 & 2 My Food System
Thurs	13-Apr-2017	Genetic modification	Film reflection 3
Tues	18-Apr-2017	Organic Agriculture	
Thurs	20-Apr-2017	Cover crops and soil organic matter	
SAT	22-Apr-2017	FIELD TRIP TO BARC	
Tues	25-Apr-2017	Food waste: Just Eat it - movie	
Thurs	27-Apr-2017	What the world eats	
Tues	2-May-2017	US Farm Bill	Film reflection 4
Thurs	4-May-2017	Half class: Q&A with Lealin Queen about Films	
Mon	8-May-2017		Food System Films
Tues	9-May-2017	Film Screening Day 1	
Thurs	11-May-2017	Film Screening Day 2	