Food, Population, and the Environment Syllabus

AEDE 4597 SPRING 2024

Course Information

- Course times and location: Mondays and Wednesdays 11:10AM 12:30PM in 020
 Page Hall
- Credit hours: 3
- Mode of delivery: In Person

Instructor

- Name: Eliot Alexander
- Email: alexander.632@osu.edu
- Phone Number: 501-952-8215
- Office location: 231 Ag Admin
- Office hours: Tuesdays and Thursdays from 1-2pm
 - o I'll also be available over Zoom at go.osu.edu/eliot
- Preferred means of communication:
 - o My preferred method of communication for questions is **email.**
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your <u>notification preferences</u> (go.osu.edu/canvasnotifications) to be sure you receive these messages.

Teaching Assistant

- Name: Zheng Hou
- Email: hou.582@buckeyemail.osu.edu

Course Prerequisites/Co-Requisites

Jr or Sr standing. Not open to students with credit for 597.01, 4597.01H (597.01H), IntStds 4597.01 (597.01), or 4597.01H (597.01H).

Course Description

Issues related to world-wide population increases, food production, and associated environmental stress; policy options for lessening these concerns, especially in low-income countries. This course seeks to analyze the challenges of feeding the growing human population whiles conserving the environmental and natural resources on which agriculture and other economic activities depend. Given the uneven patterns of population growth, attention will be focused on developing regions (Asia, Latin America and Sub-Saharan Africa) which are projected to experience majority of population increase. Additionally, this course will require students to write term papers on a developing country of their choice.

General Education Expected Learning Goals and Outcomes

As part of the Lived Environments category of the General Education curriculum, this course is designed to prepare students to be able to do the following:

- Successful students will analyze an important topic or idea at a more advanced and indepth level than in the Foundations component. [Note: In this context, "advanced" refers to courses that are e.g., synthetic, reply on research or cutting edge findings, or deeply engage with the subject matter, among other possibilities.]
 - Successful students are able to engage in critical and logical thinking about the topic or idea of the theme.
 - Successful students are able to engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.
- Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.
 - Successful students are able to identify, describe, and synthesize approaches or experiences as they apply to the theme.
 - Successful students are able to demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.
- Successful students will explore a range of perspectives on the interactions and impacts between humans and one or more types of environment (e.g., agricultural, built, cultural, economic, intellectual, natural) in which humans live.
 - Successful students are able to engage with the complexity and uncertainty of human-environment interactions.

- Successful students are able to describe examples of human interaction with and impact on environmental change and transformation over time and across space.
- Successful students will analyze a variety of perceptions, representations, and/or discourses about environments and humans within them.
 - Successful students are able to analyze how humans' interactions with their environments shape or have shaped attitudes, beliefs, values, and behaviors.
 - Successful students are able to describe how humans perceive and represent the environments with which they interact.

As part of the Sustainability category of the General Education curriculum, this course is designed to prepare students to be able to do the following:

- Successful students will analyze an important topic or idea at a more advanced and indepth level than in the Foundations component. [Note: In this context, "advanced" refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.]
 - Successful students are able to engage in critical and logical thinking about the topic or idea of the theme.
 - Successful students are able to engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.
- Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.
 - Successful students are able to identify, describe, and synthesize approaches or experiences as they apply to the theme.
 - Successful students are able to demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.
- Successful students will analyze and explain how social and natural systems function, interact and evolve over time; how human well-being depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors and institutions impact multifaceted potential solutions across time.
 - Successful students are able to describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of these systems.
 - Successful students are able to describe, analyze, and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, present, and future.

 Successful students are able to devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values.

How This Course Works

Mode of delivery: This course is taught in person. Students are expected to attend class each week during the scheduled meeting sessions. Exams will be administered in class during the scheduled class meetings as found on the course schedule.

Pace of online activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a 3 credit-hour course. According to Ohio State bylaws on instruction (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of [C] average.

Attendance and participation requirements: Research shows regular participation is one of the highest predictors of success. With that in mind, I have the following expectations for everyone's participation:

• Participating in online activities for attendance: at least once per week
You are expected to log in to the course in Carmen every week. During most weeks you
will probably log in many times. If you have a situation that might cause you to miss an
entire week of class, discuss it with me as soon as possible. In the case of emergency
or illness, contact the instructor as soon as possible to discuss possible
accommodations at the discretion of the instructor and with appropriate documentation.

Course Materials, Fees and Technologies

Required Materials and/or Technologies

• The World Food Economy by D. Southgate, D. Graham, and L. Tweeten

Required Equipment

- Computer: current Mac (MacOS) or PC (Windows 10) with high-speed internet connection.
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access (go.osu.edu/student-tech-access).

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the <u>installing Office 365</u> (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use <u>BuckeyePass</u> (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the <u>BuckeyePass - Adding a Device</u> (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes, good for 365 days, that can each be used once.
- Install the Duo Mobile application (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at <u>614-688-4357 (HELP)</u> and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- <u>Navigating CarmenCanvas</u> (go.osu.edu/canvasstudent)
- <u>CarmenZoom virtual meetings</u> (go.osu.edu/zoom-meetings)



 Recording a slide presentation with audio narration and recording, editing and uploading video (go.osu.edu/video-assignment-guide)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

Self Service and Chat: go.osu.edu/it

Phone: 614-688-4357 (HELP)Email: servicedesk@osu.edu

Grading and Faculty Response

How Your Grade is Calculated

Assignment Category	Points
Exams	50
Essay	25
Group Presentation	25

See Course Schedule for due dates.

Descriptions of Major Course Assignments

Exams

Description: There will be two midterms and a final. I will drop your lower grade of the three. Because of this, I will not give any makeup exams for any reason. The final exam will be cumulative. Exam grades may or may not be curved.

Academic integrity and collaboration: Exams must be completed on your own without use of any external sources (including but not limited to notes, textbooks, websites, or other persons).

Essay

These two related assignments will enhance your understanding of general class themes by requiring you to examine trends in food demand and supply in a country as well as public policy issues relating to the country's food economy.

The Three Parts of the Paper

1. General Description of Country and Analysis of Food Demand Trends

By way of introduction, indicate the country's location and area, current population, size of the economy (i.e., GDP), and living standards (as reflected in GDP per capita as well as Gini coefficient of inequality and/or incidence of poverty). Compare and contrast living standards with corresponding indicators for neighboring countries, the region, or both. Use relevant data to assess the state of the country's demographic transition. This involves identifying trends in



death, fertility, and birth rates as well as analyzing factors causing changes in these rates (especially TFRs). Compare and contrast these national trends and factors with those of neighboring countries, the region, or both.

Identify changes in GDP per capita in the country. Compare these trends to those of neighboring countries and/or the region. Estimate annual growth in food demand. Relate this growth to population increases, changes in GDP per capita, and income-elasticity of food demand. Compare and contrast demand trends in the country with demand trends for the region, neighboring countries, or both.

2. Supply of food

Describe the country's geography (e.g., water availability and land resources). Analyze the current level of agricultural development in general. Discuss relative scarcities of land and labor, and the country's prospects for agricultural development. Compare these factors with those in neighboring countries and/or the region.

Report trends in agricultural land use and forest area, and compare them with those of neighboring countries and/or the region. Report trends in fertilizer applications, irrigation, and mechanization, and relate these trends to changes in production per hectare. Using supporting data, determine whether total factor productivity (TFP) in agriculture has been rising, falling, or staying the same, and compare this to TFP trends in neighboring countries and/or the region. Examine trends in per-capita food output. If the trend has been positive, identify the underlying reasons. Likewise, determine how per-capita output could be raised if the trend has been negative or static.

3. Challenges and Policy

Based on the preceding survey of trends in the demand and supply of food, identify an economic issue for the country (an environmental issue, food security, etc.). Indicate the size of the problem, both quantitatively and qualitatively (e.g., annual deforestation as a percentage of remaining forests as well as likely environmental impacts of this deforestation, changes over time in the number of undernourished people, etc.). Examine the causes of the problem, including market failure, intervention failure, and lack of investment in public goods. Based on this causal analysis, propose solutions (e.g., policy reform). When you consider your solution, provide an objective analysis of the likelihood for the success of your proposed solution. Assess whether other nearby countries have undertaken similar policies with success.

General Policies

You must submit your essay on Carmen no later than seven days before you present. For example, if you present on November 21, you upload the electronic version on Carmen before midnight of November 14.

Academic misconduct is not acceptable. In particular, appropriate citations and references are required for all material used in the term paper that is not your own work. Copying someone else's answers on an exam constitutes academic misconduct, as does failure to cite

bibliographic sources in a term paper. If you have any doubts concerning this policy, it is up to you to consult the instructor.

It is my duty as instructor to report to the Committee on Academic Misconduct all instances of academic misconduct. All papers will be assessed with an originality check feature, which compares your paper to other papers available online, including papers submitted in previous iterations of this class. We will use this tool to assess potential plagiarism. Your best bet to avoid plagiarism is to write your own paper and to properly cite any material or statements you take from the work of others.

Academic integrity and collaboration: Your written assignments, including discussion posts, must be your own original work. You are encouraged to ask a trusted person to proofread your assignments before you turn them in but no one else should revise or rewrite your work.

Group Presentation

For your presentation, you will reframe the work you did for Part 3 of the paper as a presentation recommending policy changes to leaders of your group's chosen countries. Imagine you are hired as an economic consultant to identify a few major problems facing this particular country and recommend specific, realistic policy changes the government can make. Ignore potential political obstacles to the solutions; recommend the ideal solutions that would best help with the problems.

You will present in a group of three. You should each spend time presenting your own response to the above prompt, and you should also spend time comparing and contrasting problems and solutions that your similar countries face. Each final presentation should have a duration of at least 15 minutes.

I'll also ask that everyone gives a practice presentation in class that lasts at least two minutes. Your practice presentation may entail either

- 1. Your progress so far on the final presentation, or
- 2. The learning skills topic scheduled for that day, which includes making S.M.A.R.T. goals, how to best prepare for an exam, how to overcoming procrastination, etc. For these, please first schedule an appointment with an Academic Coach in the Dennis Learning Center, and note in the scheduling form that you'd like to discuss that topic. Attend the meeting, and give a brief presentation on what you learned.

Sign up for the day and topic on Carmen. If you chose option 2, you will of course get the regular extra credit offered for meeting with an Academic Coach.

Late Assignments

Please refer to Carmen for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. You may submit most



assignments late for a late penalty of 10% per day after the deadline. These assignments will be available to do on Carmen for one week after their deadline. I do not have any exceptions to this policy (accepting work more than one week late, dropping the late penalty, etc.).

Instructor Feedback and Response Time

I am providing the following list to give you an idea of my intended availability throughout the course. Remember that you can call <u>614-688-4357 (HELP)</u> at any time if you have a technical problem.

- Preferred contact method: If you have a question, please contact me first through my
 Ohio State email address. I will reply to emails within 24 hours on days when class is
 in session at the university.
- Class announcements: I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check <u>your notification preferences</u> (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- Grading and feedback: For assignments submitted before the due date, I will try to
 provide feedback and grades within seven days. Assignments submitted after the due
 date may have reduced feedback and grades may take longer to be posted.]

Grading Scale

93-100: A

90-92.9: A-

87-89.9: B+

83-86.9: B

80-82.9: B-

77-79.9: C+

73-76.9: C

70-72.9: C-

67-69.9: D+

60-66.9: D

Below 60: E

Other Course Policies

Discussion and Communication Guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style**: While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics.
- Tone and civility: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online. I will provide specific guidance for discussions on controversial or personal topics.
- Citing your sources: When we have academic discussions, please cite your sources
 to back up what you say. For the textbook or other course materials, list at least the title
 and page numbers. For online sources, include a link.
- Backing up your work: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Academic Integrity Policy

See <u>Descriptions of Major Course Assignments</u> for specific guidelines about collaboration and academic integrity in the context of this online class.

Ohio State's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University, or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.



If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- <u>Committee on Academic Misconduct</u> (go.osu.edu/coam)
- <u>Ten Suggestions for Preserving Academic Integrity</u> (go.osu.edu/ten-suggestions)
- <u>Eight Cardinal Rules of Academic Integrity</u> (go.osu.edu/cardinal-rules)

Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

- 1. Online reporting form at equity.osu.edu,
- 2. Call 614-247-5838 or TTY 614-688-8605,
- 3. Or Email equity@osu.edu



The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual
 misconduct as soon as practicable but at most within five workdays of becoming aware
 of such information: 1. Any human resource professional (HRP); 2. Anyone who
 supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty
 member.

Diversity

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

- https://odi.osu.edu/
- https://odi.osu.edu/racial-justice-resources
- https://odi.osu.edu/focus-on-racial-justice
- https://cbsc.osu.edu/

In addition, this course adheres to **The Principles of Community** adopted by the College of Food, Agricultural, and Environmental Sciences. These principles can be found at https://cfaesdei.osu.edu/about-us/cfaes-principles-community. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (https://cfaesdei.osu.edu/). If you have been a victim of or a witness to harassment or discrimination or a bias incident, you can report it online and anonymously (if you choose) at https://equity.osu.edu/.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

For students in the College of Food, Agricultural, and Environmental Sciences, David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor on the Columbus campus. To contact David, please call 614-292-5766. Students should mention their affiliation with CFAES if interested in speaking directly with David.

Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting Accommodations

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the Safe and Healthy Buckeyes site for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Disability Services Contact Information

Phone: 614-292-3307

• Website: slds.osu.edu

• Email: slds@osu.edu

In person: <u>Baker Hall 098, 113 W. 12th Avenue</u>

Accessibility of Course Technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- CarmenCanvas accessibility (go.osu.edu/canvas-accessibility)
- <u>CarmenZoom accessibility</u> (go.osu.edu/zoom-accessibility)

Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Week	Week Topics, Readings, Assignments, Due Dates	
Jan. 8-14	Syllabus and Ch. 1, Ch. 2-2.3	
Jan. 15-21	2.3-end	
Jan. 22-28	3-3.1, 3.2-3.3	
Jan. 29 – Feb. 4	3.4-end, 4-4.1	
Feb. 5-11	4.2, 4.3-end	
Feb. 12-18	5-5.2	
Feb. 19-25	5.3-end	
Feb. 26 – Mar. 3	Midterm 1 (Feb. 26), 6-6.3	
Mar. 4-8	6.4-end, 7-7.2	
Mar. 9-17	Spring Break	
Mar. 18-24	7.3-end	
Mar. 25-31	8-8.2, 8.3-end	
Apr. 1-7	Midterm 2 (Apr. 1), Presentations	
Apr. 8-14	Presentations	
Apr. 15-21	Presentations	
Apr. 22	Presentations	
Final Exam	Monday, Apr 29 at 12:00pm-1:45pm	