

AECN 220 International Agricultural Trade

Syllabus

This version: [April 27, 2021](#)

Basic Information:

Instructor: John Beghin (beghin@unl.edu); Office: 216 Filley Hall;

TA: Montana Riecken (Montana grades the FTP assignments and multiple choice exams)

Office hours: By appointment or right after lecture in my office and by zoom 3:45 to 4:30pm. Else, request by e-mail is best. (I have a Plexiglas screen and ventilate my office with an open window so it is covid-safe). I do not monitor my mailbox in Canvas. Please, use my regular email address.

Lecture time and location: T/TH 2:30-3:45pm 210 Filley Hall. Note we are restricted to 20 students in the room I will zoom in real time from the classroom and use the zoom white board.

Prerequisite: AECN 141 or ECON 212 or equivalent micro-economics course elsewhere.

Required Book: None. I like Colin Carter's book, *Futures and Option Markets. An Introduction*, (Rebel Text, 2015) (around \$35 in paper back on EBay or Amazon).

Course objectives:

This course introduces students to foundational concepts of international agricultural trade with a strong focus on world agricultural commodity and foreign exchange markets. This course establishes basic literacy in international trade and prepares students for higher-level agribusiness courses with an international trade component. This course satisfies ACE 9 (exhibit global awareness or knowledge of human diversity through analysis of an issue. The issue is how humans exchange agricultural goods and food across borders under different policies, regulations, and economic conditions).

Opportunities to acquire knowledge:

The course is applied in nature. Students immerse themselves in actual agricultural trade case studies and use the concepts through assignments focusing on agriculture, food and currency markets. The course enables students to understand and apply basic concepts to real-life situation and analyze issues arising in moving agricultural and food goods across borders, in presence of policy, regulation and other shocks creating costly frictions to exchange goods. The role of differences across countries in transport infrastructure, policy setting, natural resource endowments, sources of risk, food taste and culture is emphasized in analyzing the international movement of commodities and food goods.

Expected learning outcome:

Students should understand and be able to apply basic agricultural trade concepts (e.g., foreign exchange rate, agricultural trade policy) and the role of various trade costs (transportation, cost of regulation, hedging risk, cultural differences, etc.) in determining agricultural trade flows. Students will acquire a stronger understanding of international competitiveness in various agricultural markets and the benefits of trading agriculture and food goods. They will be able to analyze agricultural trade policy shocks and other events affecting agricultural and food trade between countries. They will also learn the basic of hedging foreign exchange risk through a semester long hedging project.

Course content:

The course consists of lectures, guest lectures, assignments, and students' short presentations. To

achieve the course objectives, it is important that there is active participation in class and that assignments are completed on time. Course material are available on Canvas. An outline of topics follows.

Outline of topics:

1. Some stylized facts on agricultural and food trade: our important trade partners and composition of ag-food trade. Markets in which we are competitive and not competitive. This at the national level and Nebraska level. How important is agricultural trade in total trade of good and services? Basics of comparative advantages and sources of competitiveness (informal on land abundance, feed abundance, infrastructure, etc.).
2. Foreign exchange rate and balance of payments. This section would introduce exchange rate determination (PPP, interest rate differential, BOP), nominal and real ER, BOP basic notions (why bilateral trade deficits are sustainable, the role of foreign savings in BOP), basics of how to hedge exchange rate risk. The class will follow key exchange rates and the dollar index during the semester (see assignments).
3. The law of one price with trade costs in commodity markets. The fundamental equation links an elevator price to a world price to a price at destination inclusive of all trade costs (multimodal transportation, foreign exchange, border taxes and measures, SPS-TBTs, other nontariff measures (NTMs)). Transportation cost. The role of distance in agricultural trade flows. How grain is shipped, the multi-modal system used. The value of time. Transportation regulations affecting shipping cost (Jones act). Trade facilitation along the way (harbor efficiency, procedures). Scale economies in transportation. A Guest lecture by Cargill representative.
4. A cursory introduction to small versus large countries cases and world commodity price determination with excess demands and supplies. This section would rely on monthly World Agricultural & Disappearance Estimate (WASDE) reports of the USDA, which will be followed during the semester to identify large players in key commodity markets, the role of inventories, growth markets, Key exporters and importers, etc.
5. Trade barriers I. short introduction to WTO and key FTAs and market access. Custom tariffs and Tariff Rate Quotas (TRQs) in agriculture. How to analyze tariffs, TRQs, and associated welfare analysis for small countries (graphical approaches with some linear applications). The impact of trade wars with tariffs on major agricultural markets. A guest lecture by Jill O'Donnell
6. Trade barriers II. Sanitary and Phytosanitary (SPS) measures. The economics of standards. How to think about protectionism with standards (national treatment, science based risk analysis, international standards, precautionary principle). Biotechnology and issues of asynchronous regulations across countries. Emerging issues in SPS (gene editing, others). Several cases studies (Syngenta and import refusals in China, the beef hormone case, bananas in EU and Australia). How the WTO functions with concerns and disputes. Technical barriers to trade and other NTMs. Economics of labelling, packaging requirements and agri-food industries. Trade frictions based on SPS and TBTs.
7. Selected other agricultural price distortions (time permitting). Export bans/restrictions, export subsidies. Domestic farm support and world price distortions. Case studies: the magnitude of farm and trade (MFP) subsidies, US cotton and the WTO dispute with Brazil; the role of rice export bans in the 2006-08 food crisis. LDCs versus OECD countries' policymaker behavior in agriculture.

Grading procedures:

The final grade is based on a set of activities and evaluations. The value of each activity in the final

grade is indicated in between parentheses.

In class activities (worth 10% of final grade)

1. In class reporting on monthly WASDE reports by students on key commodities (soybeans, corn, wheat, beef, pork, poultry, and dairy). These will be group projects (1 group per month in February, March, and April).
2. Reporting on key exchange rates (Chinese Yuan, and dollar index), at the beginning of every lecture by individual students. All students will report at least once.
3. Students will be asked and incentivized with extra credit to attend trade events if any on campus, with the Yeutter Institute or College of Law. A few guest lectures will take place during the semester, for example, on post WW II international order (O'Donnell) and on international agricultural trade (Cargill). Attendance is required for guest lectures.

Homework assignments (50%)

Homework assignment no 1 (30%). *Hedging exercise in foreign exchange market*. This will introduce foreign exchange futures and options and foreign exchange risk management. See Futures Trading Project (FTP) in the assignment section. I will go in detail over this semester-long project in class.

Homework assignment no 2 (20%). *WTO SPS trade concerns* (see topic #6). This is a case study to investigate a specific WTO concern regarding phytosanitary and biotechnology regulations, the cause of the concern, parties involved, and its potentially slow progress and resolution. Students will learn about these actual cases using WTO published material and related economic literature.

Exams (40%)

Two midterms exams based on review questions (worth 20% each, 40% total). The final FTP report is a substitute for your final exam. These exams are based on multiple choice questions, often requiring computational steps. Dates for midterms are announced. The exams are based on multiple choice questions. I provide sample questions (a review question sheet). The final FTP report is in lieu of the final exam.

Content on Canvas

Lectures notes in slide format will be posted on Canvas by the time of lecture at the latest and the night before in most cases. I use Pages in Canvas to organize each week as a page.

Readings organized by topic including data files and video links will be posted before lectures.

Assignments and answer key (after completion) will be posted.

Review questions for exam preparation will be available as well.

Links to important websites and datasets will be integrated in Canvas to provide references to important information at the WTO and other institutions and associated databases.

Covid-19 measures

I am following UNL prescriptions regarding the pandemic. Please see [here](#). I expect the same from you in terms of respecting distance and mask wearing recommendations and other measures. Note the course will be zoomed as well as face-to-face so if some of you prefer the zoom virtual approach. That will be feasible. The experience face-to-face in class tends to be superior.

Academic integrity and dishonesty

Integrity: Students are expected to adhere to guidelines concerning academic integrity and

dishonesty outlined in Section 4.2 of University's Student Code of Conduct (<http://stuaafs.unl.edu/ja/code/>). Students are encouraged to contact the instructor for clarification of these guidelines if they have questions or concerns. The Department of Agricultural Economics has a written policy defining academic dishonesty, the potential sanctions for incidents of academic dishonesty, and the appeal process for students facing potential sanctions.

Appeals: The Department also has a policy regarding potential appeals of final course grades. These policies are available for review on the department's website below: (<https://agecon.unl.edu/undergraduate/academic-integrity-statement.pdf>).

Plagiarism will result in a grade of zero and a report to Student Judicial Affairs. It is plagiarism to copy words written by someone else without putting them in quotation marks and documenting the source. It is plagiarism to take a passage written by someone else, change a few words, and then try to pass it off as your own writing. It is plagiarism to use information from another source without making it clear where the information has been obtained. If you are confused about plagiarism, check with the instructor. Plagiarism is academic dishonesty that is just as bad as cheating on a test. Exams, problem sets, and the student project will be evaluated for accuracy in solving problems and clarity of expression in interpreting results and drawing out implications for economic policy. Problem sets will be assessed for the professionalism of the writing. I use the plagiarism app Turnitin to make sure your final report is original.

Emergency response

- Fire Alarm (or other evacuation): In the event of a fire alarm: Gather belongings (Purse, keys, cellphone, N-Card, etc.) and use the nearest exit to leave the building. Do not use the elevators. After exiting, notify emergency personnel of the location of persons unable to exit the building. Do not return to building unless told to do so by emergency personnel.

Tornado Warning: When sirens sound, move to the lowest interior area of building or designated shelter. Stay away from windows and stay near an inside wall when possible.

- Active Shooter: Evacuate: if there is a safe escape path, leave belongings behind, keep hands visible and follow police officer instructions. Hide out: If evacuation is impossible secure yourself in your space by turning out lights, closing blinds and barricading doors if possible. Take action: As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter.

- UNL Alert: Notifications about serious incidents on campus are sent via text message, email, unl.edu website, and social media. For more information go to: <http://unlalert.unl.edu> .

- Additional Emergency Procedures can be found here: <http://emergency.unl.edu>

Situational Preparedness



[Fire - Pull Alarm, Use Nearest Exit](#)



[Shooting - Run, Hide, Fight](#)



[Gas Leak - Report](#)



[Severe Weather - When Thunder Roars
Get Indoors](#)



[Hazardous Material - Report](#)



[Flooding - Turn Around Don't Drown](#)



[Bomb Threat - Report](#)



[Tornado - When Warning is Issued Take](#)



Special needs:

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can discuss options privately. To establish reasonable accommodations, I may request that you register with Services for Students with Disabilities (SSD). If you are eligible for services and register with their office, make arrangements with me as soon as possible to discuss your accommodations so they can be implemented in a timely manner.

SSD contact information: 117 Louise Pound Hall; [402-472-3787](tel:402-472-3787)

Tentative schedule (as of 4/27)

Lecture & date	Topic	Remarks
#1 1/26	Cancelled –snow day	Cancelled
#2 1/28	Introduction and syllabus, TFP project	Attendance required
#3 2/2	TFP project cont.. Stylized facts on ag & food trade, Export demand determinants (commodity and food) --basics	Attendance required
#4 2/4	Basics of comparative advantage and competitiveness in agricultural markets	
#5 2/9	End of comparative advantage, Foreign exchange rate and balance of payments, foreign savings and deficits,	WASDE report release
#6 2/11	Determinants of exchange rate (PPP, interest rates, BOP)	
#7 2/16	WASDE report student presentation. End of exchange rate section. Dollar index	Zoom lecture due to weather
#8 2/18	Exchange rate (end). Hedging risk	
#9 2/23	TFP hedging with futures, margin account	Attendance required. Exchange rate reporting starts in class.
#10 2/25	Hedging and margin account cont.	Attendance required
#11 3/2	Hedging with variable basis. World market equilibrium	
#12 3/4	Large country cases, endogenous world prices	Review session based on review questions
#13 3/9	Exam 1. No lecture	Review questions provided. WASDE report release
#14 3/11	Trade costs. Trade barriers I. tariffs and TRQs.	
#15 3/16	WASDE report student presentation, group 2. Trade cost continued.	Attendance required
#16 3/18	Brad Hibbs –Cargill on international wheat trade	Confirmed. Attendance

		required
#17 3/23	Trade cost continued on TRQs. TFP hedging with options.	Attendance required
#18 3/25	Hedging with options (cont.). Trade costs	Attendance required
#19 3/30	Guest speaker Jill O'Donnell on world trading system issues	Attendance required . Date is confirmed
#20 4/1	Trade barriers II. SPS policies, economics of standards, the SPS and TBT agreements.	
#21 4/6	Trade barriers II cont. Trade concern assignment.	Duo assignment on ag/food SPS concerns
#22 4/8	Trade concerns and WTO (Before the disputes). GMO and biotech.	WASDE report release 4/9
#23 4/13	Transportation issues and trade costs	
#24 4/15	WASDE report student presentation group 3. Review session in class	
#25 4/20	Exam 2 no lecture	Review questions will be provided by 4/13
#26 4/22	FTP project: How to close your hedges. (Time permitting) end of transportation. Time permitting other taxes at the border, Counter Vailing Duties and Anti Dumping (CVD & AD). (TBD)	Attendance required
#27 4/27	TFP final report explanation and graphs. Evaluation (online)	Attendance required
#28 4/29	Presentation of concern cases studies (12 short presentations)	Attendance required
Finals week	Final TFP report due May 2 by midnight. No final exam.	