

AEB3315: Futures Markets and Risk Management in Agriculture – Spring 2024

Course Time and Location:

- Semester: Spring 2024
- Time and Location: M, W, F |Period 8 (3:00-3:50 pm), FLG (FLG 0220)

Instructor information:

- Instructor: Dr. Xumin Zhang, Lecturer (Food and Resource Economics)
- Office: Food and Resource Economics, 1177 McCarty Hall A
- Contact: (352) 294-7623; xumzxm@ufl.edu;

Office Hours and Location:

Tuesday, Wednesday, Thursday, 2-4 pm or by appointment (Zoom conference: <https://ufl.zoom.us/j/3310373641>)

Teaching Assistant: Lijun Liu, ll2700@ufl.edu. Office Hours: TBD.

Course Description (from Catalog):

Basic elements and principles of agricultural commodity marketing with emphasis on the futures industry. Includes the use of futures markets for speculating and risk management for agriculture and finance. Participation in a computerized futures trading game is required.

The course presents derivatives instruments such as options, futures, and forwards. Derivatives have become crucial investment tools in recent decades as they allow us to manage and reduce risk associated with changes in interest and exchange rates, commodity prices, inflation, and weather. We focus on the use of futures markets in trading agricultural and other commodities. We will use a commodity futures trading simulation from the Chicago Mercantile Exchange (CME) where you will be required to participate in this trading exercise during the semester.

Prerequisites: There is no prerequisite. Students are expected to have a working knowledge of basic economics, algebra, and finance/accounting.

Undergraduate Advisor: Ms. Danielle Shu; 1170B McCarty Hall A; (352) 294-7640;
E-mail: dshu@ufl.edu; [Schedule an appointment](#)

Undergraduate Coordinator: Dr. Misti Sharp; 1189 McCarty Hall A; (352)294-7632;
E-mail: mistisharp@ufl.edu; [Schedule an appointment](#)

FRE Technology Assistance: Dave Depatie; 1197 McCarty Hall A; (352) 394-7641;
E-mail: ddepatie@ufl.edu

Expected Student Learning Outcomes

After the successful completion of AEB3315, a typical student should be able to:

- Demonstrate an understanding of the derivatives instruments which are applied by high-level management in the agribusiness and finance area.
- Demonstrate an understanding of the mechanics of future markets for speculation and risk management.
- Apply the methods of market analysis such as speculating and hedging to reduce unwanted risk.
- Explain and evaluate these instruments and models for valuation, risk management and financial engineering.

Course Summary/Topics:

- Unit 1: Overview of Futures and Options Markets (Exam 1)

Students will be able to explain the derivatives instruments and markets.

Module 1: Introduction to the Markets

Module 2: Futures Markets

Module 3: Options Trading

- Unit 2: Speculations with Futures Contracts (Exam 2)

Students will be able to explain the mechanics of future markets for speculation.

Module 4: Commodities

Module 5: Speculating – Fundamental Analysis

Module 6: Speculating – Patterns on Price Charts

Module 7: Speculating - Statistical Trend Following Methods

Module 8: Setting Objectives

- Unit 3: Hedging with Futures and Options (Exam 3)

Students will be able to explain the mechanics of hedging to reduce unwanted risk.

Module 9: Hedging with Futures

Module 10: Options Markets

Module 11: Hedging with Options

- Unit 4: Trading Strategies (No Exam)

Students will be able to apply these instruments and models for valuation, risk management, and financial engineering.

Course Syllabus AEB3315

Module 12: Option Trading Strategies

Module 13: Trading on Market Volatility

Required Course Materials:

- **Textbook:** Carter, Colin A. Futures and Options Markets: An Introduction, 2nd Edition, 2018, RebelText.
- **E-learning:** There is an [E-Learning Canvas webpage](#) for this course. E-learning can be accessed via <http://elearning.ufl.edu> using your Gatorlink username and password. If you are having difficulties accessing E-learning, please contact the UF Computing Help Desk by calling (352)-392-HELP or via email helpdesk@ufl.edu.

Class Structure: Primarily Classroom (in person)

Composition of Final Score:

Course Assignments	Total Points	% of Total
Assignments (Quizzes, Problem Sets, Readings, etc.)	150 points	25%
Attendance 50 Points	50 points	8.4%
Agricultural Commodity Trading Simulation (ACTS) Project	100 points	16.6%
Exams (3)	300 points	50%
Final Exam (optional, to replace one exam)		
Total	600 points	100%

Assignment due dates are provided in Canvas > Syllabus (or Assignments). Late submissions are acceptable, but will incur a 50% penalty deduction.

Course Assignments and Expectations:

Canvas Assignments (150 points):

There will be quizzes for each module (e.g., short answer questions, etc.).

There will be Individual Reflections, Readings (Perusall), or Experiential Learning Activities for each module.

There will be one Problem Set (PS) for each unit, a total of 3 problem sets (multiple questions).

I apply a double-deadline approach to assignments (quizzes and learning activities). The first deadline usually is one week after the lesson (for students who need strict deadlines). The second deadline is the Monday before the exam day (Exams usually are scheduled for Friday). Students choose the deadlines that work better for effectively managing time (time management is the key to success).

Exams (300 points): There will be 3 required non-cumulative exams. The exams will include short answers and calculations. The exams will be administered in class, and each will be a 50-minute test.

Final Exam (Optional):

An optional comprehensive final exam will be given on May.2nd, at 3–5 pm in the classroom. Students wishing to replace an exam grade from the semester may take the final exam. Students who miss an exam for any reason (excused or unexcused) may take the final to replace the missing grade. Any student caught cheating on any exam will receive a 0 on the exam and may not use the final to replace that grade (I retain the option of failing any student caught cheating on any exam – the minimum penalty for cheating is a 0 without the option to replace the grade).

Agricultural Commodity Trading Simulation (ACTS) Project (100 points)

The Agricultural Commodity Trading Simulation (ACTS) project is a simulated training project for students to trade futures with real-time market prices without the risk of losing real money. It is designed to provide students with hands-on experience in trading agricultural futures, allowing them to explore the dynamics of commodity markets, practice speculative trading, and gain insights into risk management strategies. By providing students with a safe and controlled environment to practice commodity trading, the ACTS project aims to equip them with valuable skills and insights that can be applied in real-world agricultural futures markets.

- ACTS #1 Simulator Sign up 5 points
- ACTS #2 Commodity Selection (3 commodities) 5 points
- ACTS #3 Fundamental Analysis (1 commodity) 10 points
- ACTS #4-#7 Four Rounds of Trading Simulation 15 points
(Total 4)
- ACTS #8 Summary Report 20 points
- Total points available: 100 points

There will be a set of assignments for the ACTS project. It includes simulator sign-up, commodity selection, fundamental analysis, FOUR rounds of simulation, and a summary report. Students will work alone for the ACTS project. Rules and assignments will be available on Canvas.

CME Practice Simulator: https://www.cmegroup.com/trading_tools/simulator

At the end of this project, students will be able to:

1. Apply fundamental and technical analysis to interpret market information and make informed trading decisions.
2. Gain practical experience in executing trades, analyzing market trends, and making informed decisions in a simulated environment.
3. Understand the importance of risk management and the difference between simulated outcomes and real-world financial consequences.

Course Syllabus AEB3315

4. Recognize the role of agricultural commodities in the broader financial landscape and their significance in global markets.

Extra credits: There will be extra points available throughout the semester.

Weekly Schedule:

Week	Module	Topic	Assignments Due
1		Get Started (1 st day of class)	Jan.8th
Unit 1 (Overview of Futures and Options Markets)			
1	1	Orientation, The Markets	
2	2	Futures Markets (A) ACTS Project #1 Kickoff (Simulator Sign up)	
3	2	Futures Markets (B)	
4	3	Options Trading ACTS Project #2 Commodity Selection assigned	
Unit 2 (Speculations with Futures Contracts)			
5	4	Commodities	
6	5	Fundamental Analysis ACTS Project #4 Round 1	ACTS Commodity Selection due (W6) Problem Set 1 due (W6) Exam 1 (W6, Feb.16th)
7	6	Patterns on Price Charts	
8	7	Statistical Trend Following Methods ACTS Project #5 Fundamental Analysis / Round 2	ACTS R1 due (W8)
9		Spring Break	
10	8	Setting Objectives	
Module 3 (Hedging with Futures and Options)			
11	9	Hedging with Futures ACTS Project #6 Round 3	ACTS Fundamental Analysis R2 due (W11) Problem Set 2 due (W11) Exam 2 (W11, Mar.22nd)
12	10	Options Markets	
13	11	Hedging with Options ACTS Project #7 Round 4 ACTS Project #8 Final Report	ACTS R3 due (W13)
Module 4 (Trading Strategies)			

Course Syllabus AEB3315

14	12	Options Trading Strategies	
15	13	Trading on Market Volatility	ACTS R4 due (W15) Problem Set 3 due (W15) Exam 3 (W15, Apr.19th)
16		Wrap up	ACTS Final Report due (W16, Apr.24th)
17		Final Exam (optional) 5/2/2024 @ 3:00 PM - 5:00 PM	

Note: The instructor reserves the right to change the terms and dates stated in this course syllabus at any time. Any changes will be communicated on e-learning as an announcement. It is solely the student's responsibility to stay informed of any changes.

Please note that there are many holidays in the fall.

*****By enrolling in this course, you are agreeing to the terms outlined in this syllabus!!*****

Student Evaluation: the grade scale is at the discretion of the professor. UF does not have an A+ option. You must provide percentage, total points, and grade points in a table such as this:

Grade	Percentage	Total points	Grade Points
A	91% or more		4.00
A-	89.0 – 90.99%		3.67
B+	85.0 – 88.99%		3.33
B	82.0 – 84.99%		3.00
B-	79.0 – 81.99%		2.67
C+	75.0 – 78.99%		2.33
C	72.0 – 74.99%		2.00
C-	69.0– 71.99%		1.67
D+	65.0 – 68.99%		1.33
D	62.0 – 64.99%		1.00
D-	60.0 – 61.99%		0.67
E	59.99% or less		0.00

*****Please note that grades are not ‘rounded’ or ‘adjusted’ at the end of the term.*****

Grades and Grade Points: For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Attendance and Make-Up Work: Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

For online course with recorded materials a statement informing students of privacy related issues such as:

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Course Evaluation

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give

Course Syllabus AEB3315

feedback in a professional and respectful manner is available at:

<https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services. Address: 3190 Radio Road. Services provided:

- Counseling services
- Groups and workshops
- Outreach and consultation
- Self-help library
- Wellness coaching

Student Success Initiative: <https://studentsuccess.ufl.edu/> Services provided:

- Advising
- Peer mentoring
- Coaching
- Peer tutoring

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

On-Line Students Complaints: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>

Lauren's Promise: I will listen and believe you if someone is threatening you.

Lauren McCluskey, a 21-year old honors student athlete, was murdered on October 22, 2018, by a man she briefly dated on the University of Utah Campus. We must all take actions to ensure this never happens again. Any form of sexual harassment or violence will not be excused or tolerated at the University of Florida.

If you are experiencing sexual assault, relationship violence, or stalking, you can take the following actions:

- If you are in immediate danger, call 911.
- Report it to me, and I will connect you to resources.
- Seek confidential sources of support and help:
 - [UFPD Office of Victim Services](#): 51 Museum Road, 352-392-5648
 - [Sexual Assault Recovery Services \(SARS\)](#): Infirmary Building, 352-392-1161
 - Alachua County Rape Crisis Center (confidential): 352-264-6760

Diversity, Equity, and Inclusion: The University of Florida's College of Agricultural and Life Sciences (CALs) supports the University of Florida's commitment to diversity, equity, and inclusion. By fostering a sense of belonging for students, staff, and faculty, while leveraging the uniqueness of the people who study and work at the university, we believe our campus community is enriched and enhanced by diversity, including but not limited to, race, ethnicity, national origin, gender, gender identity, sexuality, class, and religion. This course will support an understanding of the diversity of our distance and campus communities as well as our agricultural and natural resource communities, locally and globally.

This course will strive to create a learning environment for students that supports a diversity of thoughts, perspectives, and experiences while honoring your identities. In this class we will take the following approaches to help achieve this:

- All course participants will use the names and pronouns provided by students for use in class. If these differ from those that appear in official university records, you can change your Display Name at One.UF (see [Student Help FAQs - eLearning - University of Florida \(ufl.edu\)](#)).
- If your performance in this course is being impacted by your experiences inside and/or outside the classroom, do not hesitate to contact the instructor and/or teaching assistant (TA). Instructors in CALs are a great resource for you and you may provide feedback anonymously. Feedback may result in general announcements to the class, if necessary, or reporting to appropriate UF personnel to address your concerns.

Course Syllabus AEB3315

- CALS instructors and TAs like many people, are still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that makes you feel uncomfortable, please discuss with your instructor or TA or contact the CALS Dean's Office (cals-dean@ufl.edu).