Finance 4319-001: Financial Derivatives Course Syllabus for Fall 2014

TuTh 5:30P.M. – 6:50P.M. College of Business Administration - COBA Room 252

Instructor: Arun Narayanasamy Ph.D. Office: COBA Room 627

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I only open emails containing your name, class and section in the subject heading.

Office Hours: I am typically available after class or by appointment. **Website:** Course materials if any will be posted on Blackboard.

Class Conduct:

All students must sign the attached form indicating that they have read and received the syllabus within 2 class periods after the first day of class. All reading materials and course updates will be announced in class and it is the student's responsibility to collect the material from peers in case of absence.

Course Description:

Topics included in this course are an introduction to options and futures markets, investment and risk management strategies using these derivative products, and pricing of options and futures contracts. Additional coverage includes basic swap agreements, exotic options, and corporate risk management. **Course Prerequisite:** FINA 3313

** ** To better understand the material taught in this course, I would strongly recommend students to take FINA 3315 before taking this class. (It is not a pre-requisite for this course though)

Coming into this course, students are expected to be able to:

- (1) Apply basic algebra, calculus, statistics and solve word problems.
- (2) Demonstrate the interaction between supply and demand in determining market prices.
- (3) Explain accounting relationships.
- (4) Use the financial calculator TI BAII+.

Course Objectives:

Whether you are considering a career in finance or any other area of business, when you complete this course, you will be equipped with a variety of financial concepts that are useful for investors and all business professionals. Specifically, course learning objectives are:

- (1) Understand and explain the differences between the various financial derivative securities (Futures, Forwards and Options).
- (2) Understand the terminology, risks and costs associated with financial derivatives.
- (3) Explain the mechanics of the Futures market and evaluate the various hedging strategies using Futures.
- (4) Analyze the role and relationship between forward and futures prices.
- (5) Explain the mechanics of the Options market; analyze the various trading strategies involving options and compute payoff for different strategies.
- (6) Determine the price of options using binomial trees.
- (7) Define and interpret the different Greek measures used to define the risk of options.

Required Textbook and Materials:

1. **Text:** John C. Hull, Fundamentals of Futures and Options Markets, 8th edition, Pearson Prentice Hall.

Author's Book Website: http://www.rotman.utoronto.ca/~hull/ifom/

In addition, students are strongly encouraged to read investment articles in *The Wall Street Journal*. From time to time, I might assign reading assignments from various sources including other text chapters, *Wall Street Journal* and online articles. Students are expected to complete the reading prior to the class meetings. Also, you are encouraged to bring me articles that you find interesting and relevant to class topics. **All reading materials and course updates will be announced in class and it is the student's responsibility to collect the material from peers in case of absence.**

2. **Financial Calculator:** (ONLY TI BAII+ or TI BAII+ professional) Must be able to calculate IRR of irregular cash flows. [A financial calculator is a necessity in this course. *Texas Instruments (TI) BA II Plus* model is the ONLY calculator that will be accepted in this course. I will talk about how to use this calculator only. Students are responsible for reading the instructions and learning how to master the calculators by themselves. Students should bring the calculator to **each and every** of the classes and exams.]

Classroom Etiquette

Please respect your fellow students and the instructor by doing only class-related activities inside the classroom. This may include, but is not limited to, silencing your cell phones and refraining from non class-related talking during class time. Late arrivals or leaving the classroom early will also negatively impact your final grade (also refer to grading policies below). **No texting or browsing on any electronic devices.**

Grading:

I do not typically give grades. Grades are non-negotiable and what you earn for yourself. Grades will be based on your performance on **THREE** exams (TWO unit exams, ONE final exam), **TWO** group projects and class participation. The lowest score of the **THREE** exams and will be dropped. All TWO projects will be done as a group. The group will be assigned in class. Further instruction on group formation will be provided in class by the instructor.

Two Exams @ 30% each (Drop One Lowest of Three Exams)	60%
Two Projects @ 20% each (Group Submission)	40%
Total	100%

Letter grades will be assigned as follows:

The scale is

100 to 90	\mathbf{A}
89.99 to 80	В
79.99 to 70	C
69.99 to 60	D
Below 59.99	F

Due to university policy, grades will not be posted nor sent via email. Furthermore, I will not release course grades before they are available online. Check the UTA academic calendar for dates when course grades are available. Please do not send emails requesting grades; they will not receive a response.

There are NO opportunities for extra credit. Your grade will be determined exclusively on the above basis. Please do not ask me to make any variation in this policy. To assure consistency in grading, I will grade all student work on the homework and exams at the same time. I will not grade one student's work early. Grades are Non-Negotiable.

Attendance:

For effective learning, the semester format makes it necessary to require attendance! Absences will, therefore, be carefully monitored. Students are strongly recommended to attend each class and are expected to come to each class with the chapters read before class. Any student who must miss a class is responsible for securing any and all coursework and announcements missed from their peers.

Exams:

Exams will consist of problems and verbal questions. More information about the test will be disseminated in class. SCANTRON form 882 (available from the bookstore) may be required and must be supplied by the student, along with #2 pencils and erasers. Students must bring student ID or picture ID to receive a test booklet. Cheating, or other misconduct may result in an automatic F for the course. You will not be allowed to take the Exam if you come later than 15 minutes from the starting time or after the first student completes the exam and leaves the classroom.

No dictionaries are allowed on exams. Calculators -- you will not be allowed to use a PDA with a calculator on exams. Only TI BAII+ or equivalent calculator is allowed. Students who wear ball caps to exams will be asked to remove the cap or wear it with the bill facing backwards. When you take the exams, use this following way to fill out your name: Put your LAST name first on your scantron, then you FIRST name. I reserve the right to assign seating for test periods. Students are required to take tests at the scheduled time. Please come to class ten (15) minutes early on exam days. Tests will not be accepted after the end of the scheduled time.

Scantrons with scores will be returned on the day following the exam. Tests will not be returned, however students may review their test during the office hours of my graduate assistant, or schedule an appointment with me to learn what mistakes you have committed and any questions related to that will be answered. You will be allowed to keep your scantrons only. Any violations will be handled in accordance with UTA Policy on Academic Dishonesty.

Projects:

The purpose of the two projects is to introduce students to some practical applications of investment. Though students are expected to typically work on the projects individually, depending on the class size, the projects may be assigned as a group. Detailed description of the projects and groups will be assigned during the course of the semester. All work submitted in this course must be typed, neat, legible, concise and organized. All work should be original and properly referenced. You can schedule an appointment with me to review some sample projects.

Hard copies of the projects will be due in-class at the beginning of the class period as specified on the course calendar. Anything turned in after the class period due would be considered late submission and will not receive credit. All relevant files or soft copies of the project (document, references, data gathered, analysis charts and tables, etc.) should be placed in a folder, zipped and emailed before submitting the hard copy. Further Instructions will be provided in class.

Procedures used on projects must be fully documented and important parts of the project are to be highlighted. While partial credit will be given if something is incorrect, its magnitude depends on the extent to which instructions are followed.

Make-up Policy:

ALL EXAMS MUST BE TAKEN AT THE SCHEDULED DATE AND TIME. (Check the UTA Exam schedule on the UTA website for the Final Exam schedule.) No makeup exams will be given. If a student has to miss an exam, the instructor must be notified before the exam (not after). If you cannot make it on the day of an exam, your final will replace that score, upon documentation of the reason for absence by a medical doctor or UTA official. You can substitute the final exam for a missed exam ONLY ONE TIME.

How to Perform Well in This Course

This course is extremely comprehensive in nature. Here are several suggestions that I have for you to do well in this class.

- 1. Start early and begin raising the bar throughout the day.
- 2. Talk to students who took this class in prior semesters.

- 3. Join a study group and plan to meet at least once a week.
- 4. Read the chapter before class and be prepared for your study group.
- 5. Be sure to put effort into the homework assignments.
- 6. Study everyday. Read financial news and follow the market.
- 7. Visit me by scheduling an appointment when you have difficulty with certain concepts.
- 8. Review all mistakes made on each Exam and answer all the questions at end of chapter.

Course Calendar:

The course calendar is subject to change. It is the student's responsibility to attend class and keep up with any changes. Please read the material before class.

Dates	Day	Material
Aug 21	Thur	First Day of Class; Introduction and Syllabus;
		Return Signed Forms on Syllabus; Projects (1 and 2) Distributed
Aug 26	Tue	CH 1
Aug 28	Thur	CH 1; Labor Day Holiday Sep 1
Sep 2	Tue	CH 2
Sep 4	Thur	CH 2; Census Date Sep 8
Sep 9	Tue	CH 3
Sep 11	Thur	CH 3
Sep 16	Tue	CH 5
Sep 18	Thur	CH 5
Sep 23	Tue	CH 5
Sep 25	Thur	Exam Review
Sep 30	Tue	EXAM 1
Oct 2	Thur	Post Exam Review; CH 9
Oct 7	Tue	CH 9
Oct 9	Thur	CH 9
Oct 14	Tue	CH 10
Oct 16	Thur	Work on Project – No Class
Oct 21	Tue	CH 11
Oct 23	Thur	CH 11
Oct 28	Tue	CH 11; Last Day to Drop Classes Oct 29
Oct 30	Thur	CH 17
Nov 4	Tue	CH 17
Nov 6	Thur	CH 17
Nov 11	Tue	CH 12
Nov 13	Thur	CH 12
Nov 18	Tue	Exam Review
Nov 20	Thur	EXAM 2
Nov 25	Tue	Post Exam Review; Projects (1 and 2) Due Beginning of Class
Nov 27	Thur	Thanks Giving Holiday
Dec 2	Tue	Final Exam Review; Last Day of Classes Dec 3
Dec 9	Tue	FINAL EXAM (5:30PM – 8:00PM)

Instructor's Discretion

This syllabus represents a course plan compiled prior to the first day of classes. Circumstances may arise over the course of the semester that warrant changes to the course plan. The instructor retains the right to make any changes deemed necessary. You are responsible for all material covered in class, assigned readings and problems. **You are responsible for all announcements made in class.**

SYLLABUS ADDENDUM

Academic Dishonesty:

All students are expected to pursue their scholastic careers with honesty and integrity. It is the philosophy of this Department, this instructor, and the University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, or any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22)

Institutional procedures regarding charges of academic dishonesty are outlined in Part II, Chapter 2, of the **Handbook of Operating Procedures of The University of Texas at Arlington**. Copies of the Handbook are available at more than 75 locations on campus, including the Student Congress office, the Library, and the Finance/Real Estate Department office.

Americans with Disabilities Act (ADA):

The University of Texas at Arlington is on record as being committed to both the spirit and letter of the ADA to make reasonable adjustments in the classroom necessary to eliminate discrimination on the basis of disability. Students requesting an accommodation based on disability should meet privately with the instructor during the first week of class to discuss their special needs and advise the instructor of any special needs, abilities or limitations and to discuss the instructor's expectations in class participation, performance and work standards. Any disclosure by the students of their need for accommodations is recognized to be extremely sensitive and all conversations and other communications will be kept protected and confidential and disclosed on a need-to-know basis only.

Students are responsible for contacting and consulting with the University's **Office for Students with Disabilities** prior to contacting the instructor about any disabilities. The student should provide the instructor with some form of written documentation from the **Office for Students with Disabilities at UTA**.

Attendance Policy:

Students are expected to attend each class and students are expected to come to each class with their assignments completed. Any student who must miss a class is responsible for securing any and all assignments for coursework missed.

Drop Policy:

These policies include by reference all provisions for grade adjustment or drop policies included in the applicable Graduate or Undergraduate Catalog in effect at the start of the semester. It is the **student's responsibility** to complete the course or withdraw from the course in accordance with University regulations. No student will be dropped from the class rolls for absences. Students are strongly encouraged to verify their grade status before dropping a course after the first withdrawal date. A student who drops a course after the first withdrawal date may receive an "F" in the course if the student is failing at the time the course is dropped.

Drop for Non-Payment:

It is the policy of the University of Texas at Arlington that students who have not paid by the census date and are dropped for non-payment cannot, **under any circumstances**, receive a grade for the course. Therefore, a student dropped for non-payment who continues to attend the course will **not receive a grade for that course**. Emergency loans are available to help students pay tuition and fees. Students can apply for emergency loans by going to the Emergency Tuition Loan Distribution Center at E. H. Hereford University Center (near the southwest entrance).

Distribution of Grades:

The distribution of grades for the semester will normally adhere to the guidelines of the Department of Finance and Real Estate. These guidelines are generally based on College of Business Administration averages for similar courses.

Student Evaluation of Teaching:

The following appears in Administrative Memorandum No. 98-5, dated August 21, 1997, from the President to academic and administrative offices: "Beginning in Fall 1997, teaching evaluations will be conducted in every class every semester for every instructor of record."

College of Business Bomb Threat Policy:

Effective April 8, 1996, the College of Business Administration adopted a policy to deal with the classroom disruption caused by bomb threats in the building. Section 22.07 of the Texas Criminal law states that a Class A misdemeanor is punishable by (1) a fine not to exceed \$4,000, (2) a jail term of not more than one year, or (3) both such a fine and confinement. If anyone is tempted to call in a bomb threat, be aware that UTA has the technology to trace such phone calls.

Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats to the Business Building. Unannounced alternate sites will be available for these classes. If a student who has a class with a scheduled test or presentation arrives and the building has been closed due to a bomb threat, the student should immediately check for the alternate class site notice which will be posted on/near the main doors on the south side of the Business Building. If the bomb threat is received while class is in session, your instructor will ask you to leave the building and reconvene at another location.

Students who provide information leading to the successful prosecution of anyone making a bomb threat will receive one semester's free parking in the Maverick Garage across from the Business Building. UTA's Crime Stoppers will provide a reward to anyone providing information leading to an arrest. To make an anonymous report, call 817-272-5245.

Food/Drink in Classrooms:

College policy prohibits food and/or drinks in classrooms and labs. Anyone bringing food and/or drinks into a classroom or lab will be required to remove such items, as directed by the class instructor or lab instructor.

UTA Student Success Programs:

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817/272-6107 for more information and appropriate referrals.

Electronics Policy:

Please turn off all cell phones, pagers, and other electronic equipment during class.

E-Culture Policy:

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

Academic Misconduct

It is the philosophy of the University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22)