



Course FIN 6310, Section 501, Investment Theory and Practice
Professor Yexiao Xu
Term Fall 2021
Meetings Tuesday, 7:00-9:45PM (JSOM2.804) (Face-to-Face)

Professor's Contact Information

Office Phone	(972)883-6703
Office Location	SM 14.509 (fourth floor at the south-east end of the new JSOM building)
Email Address	yexiaoxu@utdallas.edu
Office Hours	Monday 2:30PM-3:30PM Tuesday 4:10PM-5:10PM (through Microsoft Team)
Other Information	Lecture notes, homework assignment, and grades can be downloaded from elearning at: http://www.elearning.utdallas.edu/ Please pay attention to announcement posted on elearning, but I do not read email from elearning!

Course Modality and Expectations

Instructional Model	Face-to-face (please see https://www.utdallas.edu/fall-2020/fall-2020-registration-information/ for detailed description)
Course Platform	Each lecture will be taught at the regular class time and dates in classroom specified above. Teaching materials including lecture notes and homework assignment can be downloaded from elearning at: http://www.elearning.utdallas.edu/ Lecture will NOT be recorded
Expectation	You are expected to attend all lectures. Both exams are mandatory which will be held in regular classroom in order to receive a final letter grade.

COVID-19 Guidelines and Resources

Visit [Comets United webpage](#) to obtain the latest information on the University's guidance and resources for campus health and safety.

Masks and Vaccinations

The university strongly encourage all Comets to get vaccinated and wear face coverings indoors regardless of vaccination status as recommended by the CDC. Vaccinations are widely available and it is free. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms in those who are vaccinated. You are encouraged to [get a COVID-19 vaccine](#) and register your vaccination status through the [voluntary vaccine report form](#).

COVID-19 Testing

Proactive Community Testing remains an important part of the university's efforts to protect our community. Tests are fast and free. Please check the [Comets United](#) webpage for additional information

Verifying COVID-19 Isolations or Quarantines

Students need to self-report COVID-19 positive results or exposures via an [online form](#) so that university campus tracers can verify, record, and take necessary campus precautions. Students should not attend class until cleared by campus tracers.

Daily Health Screening

Unvaccinated Comets will be expected to complete the mandatory [Required Daily Health Screening](#). Those students who do not comply will be referred to the Office of Community Standards and Conduct for disciplinary action under the [Student Code of Conduct – UTSP5003](#).

Class Materials

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording

any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

General Course Information

Pre-requisites,	Fin 6307, (or Stat 5311), and Fin 6301
Course Description	<p>During the recent financial crisis and the economic recovery, we have experienced wide ride in the stock markets not only at home but abroad as well. Such volatile markets provide both challenges and opportunities for investors. As a first step in investment, we need to understand the workings of capital markets. This course is intended to provide a general overview of capital markets, financial instruments, and investment process. We emphasize the role of modern finance theory in portfolio management. Therefore, we will cover a wide range of topics such as, financial markets, security valuation, asset allocation, risk management, modern asset pricing theories, performance measurement, active portfolio management, financial derivatives, and fixed income securities. By the end of the semester, I hope you will understand how financial markets work, be able to analyze securities, and to make intelligent investment decisions. The course will also improve your ability to read financial articles and to understand current issues in financial markets.</p> <p>Because of the risky nature of investment securities, most financial decisions are made under uncertainty and based on future cash flow projection. Therefore, statistical knowledge is required, especially knowledge on probability distributions, mean, variance, covariance, and regression analysis. You must take Fin 6307 (or STAT 5311) first. It is also very important to review your calculus textbook, on the topics such as derivative and optimization. In addition, financial Management (Fin6301) is also a prerequisite.</p>
Learning Outcomes	<ol style="list-style-type: none"> 1. Utilize various pricing models to calculate security values and required rates of return 2. Apply techniques from modern portfolio theory to create efficient portfolios 3. Utilize derivative securities to manage investment risk 4. Evaluate investment performance with quantitative measures
Required Texts & Materials	Bodie, Kane and Marcus, <i>Investments</i> , 10th edition
Suggested Texts, Readings, & Materials	Burton G. Malkiel, <i>Random Walk Down Wall Street</i> Wall Street Journal or financial section of major newspapers such as the New York Times, and watch financial programs. There are several interesting movies such as: <i>Wall Street</i> , <i>Trading Places</i> , <i>Barbarians at Gate</i> , <i>Boiler Room</i> .

Assignments & Academic Calendar

	The Investment Environment
Aug. 23 Lecture 1	<p>Introduction and Statistics Review</p> <p>Financial assets, financial system and markets</p> <p>Recent trend in finance</p> <p>Statistics review</p>

	BKM, Chapters 1.1-1.7
Aug. 30 Lecture 2	Security Markets and Trading Investment process and use of different securities Security markets Trading mechanism BKM, Chapters 2.1-2.3, 3.1-3.4, and 3.6-3.9
	Portfolio Theory and Pricing Models
Sep. 7 Lecture 3	Measuring Return and Risk Note: Problem Set 1 Due in Class Return calculation, and measuring portfolio returns Measuring risk Index construction BKM, Chapters 5.4, 24.1(835-837), 5.5 (130-133), 5.6, 5.7 (139-140), 6.1(168-172), and 2.4
Sep. 14 Lecture 4	Portfolio Risk and Investment Companies Diversification, risk pooling and risk sharing Time diversification versus dollar averaging Investment companies BKM, Chapters 7.1, 7.5, and 4.1-4.6
Sep. 21 Lecture 5	Portfolio Theory Efficient frontier with risky assets and with risk-free assets Optimality condition Constructing optimal portfolios BKM, Chapters 6.2-6.4, and 7.3-7.4
	Popular Pricing Models
Sep. 28 Lecture 6	The Capital Asset Pricing Model Note: Problem Set 2 Due in Class Introduction to the Capital Asset Pricing Model (CAPM) The Equilibrium CAPM Review BKM, Chapters 8.1-8.3, 9(291-308)
Oct. 5	Test 1
	Portfolio Management
Oct. 12 Lecture 7	Testing the CAPM Model Estimation and testing procedure Evidence and Roll's critique The APT and Multifactor Models Constructing factor portfolios The Arbitrage Pricing Theory (APT) BKM, Chapters 10, and 13.2-13.3
Oct. 19 Lecture 8	Application of Multifactor Models The Fama and French model Hedging a factor in a multifactor models Predictability and Market Efficiency Evidence on predictability Security prices in efficient markets Technical analysis Some useful predictors BKM, Chapters 11 and 12
Oct. 26 Lecture 9	Portfolio Management Note: Problem Set 3 Due in Class Passive versus active portfolio management Market timing The Treynor-Black Model and Black-Litterman Model BKM, Chapters 27 and 24.4

Nov. 02 Lecture 10	Portfolio Performance Skill versus luck Different performance measure Style analysis and performance attribution BKM, Chapter 24.3, 24.5-24.6
	Derivative and Fixed Income Securities
Nov. 09 Lecture 11	Options Note: Project Due in Class Introduction to options Put and call parity Binomial option pricing Black-Scholes option valuation BKM, Chapters 20.1-20.5 and 21.1-21.4
Nov. 16 Lecture 12	Fixed Income Security Note: Problem Set 4 Due in Class Bond yields and pricing Interest rate sensitivity (duration) Term structure of interest rates Review BKM, Chapters 14, 15.1-15.2, and 16.1
Nov. 23	Fall Break
Nov. 30	Test 2 (in class)

Course Policies

Grading (credit) Criteria	Problem Sets 30% Midterm Examination 30% Final Examination 40% (Please directly contact my TA for grading issues!) You must take the final exam in order to receive a grade for the course
Extra Credit	No extra credit
Homework	There will be four problem sets and one mini-case distributed during the semester. All homework assignments are weighted equally and should be submitted electronically prior to class on the due date. You need to show your work in order to get the full credit. No late homework will be accepted. All electronic files need to be converted into PDF file using the name format of <i>LastNameFin6310501PS#x.pdf</i> before submission except for your Excel files. You can upload your solution in elearning. Group discussion of homework problems is allowed but each student must write his/her own solution to each problem set.
Exams	In order to be fair to everyone, exams must be taken in class on the specified dates and time. For those who cannot take on the specified date of exam due to business travel should take the exam before leaving the town. No additional credit or make up final will be granted. All exams are close book and close notes exams.
Class Attendance	Not enforced but strongly encouraged since exams are based on materials discussed in class. You will be responsible for all the materials discussed in class.
Classroom Citizenship	Class discussion is strongly encourage
Student Conduct and Discipline	The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, <i>A to Z Guide</i> , which is provided to all registered students each academic year. The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the <i>Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3</i> , and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i> . Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391). A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.
Academic Integrity	The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

	<p>Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.</p> <p>Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.</p>
Email Use	<p>The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.</p>
Withdrawal from Class	<p>The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.</p>
Student Grievance Procedures	<p>Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's <i>Handbook of Operating Procedures</i>.</p> <p>In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.</p> <p>Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.</p>
Incomplete Grades	<p>As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.</p>
Disability Services	<p>The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30a.m to 5:30p.m</p> <p>The contact information for the Office of Disability Services is: The University of Texas at Dallas, SU 22 PO Box 830688 Richardson, Texas 75083-0688 (972) 883-2098 (voice or TTY)</p> <p>Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.</p> <p>It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.</p>
Religious Holy Days	<p>The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.</p> <p>The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.</p> <p>If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.</p>
Off-Campus Instruction and Course Activities	<p>Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm. Additional information is available from the office of the school dean.</p>

These descriptions and timelines are subject to change at the discretion of the Professor.

**University of Texas at Dallas
School of Management**

**Fin 6310
Section 501**

**Prof. Yexiao Xu
Fall 2021**

About Yourself

In order for me to better organize the course, and to adapt the materials to your background, would you please tell me more about yourself?

In order for me to better organize the course, and to adapt the materials to your background, please fill the survey sheet and hand it to me after the class.

Name: _____

Phone Number: _____

Email Address: _____

Your Job (if applicable): _____

Your Background

Finance Class _____

Economics Class _____

Accounting Courses _____

Statistics and Math Courses _____

Survey:

Do you read sports section of a newspaper?

Never _____ Occasionally _____ Often _____

Do you read financial newspapers, such as the Wall Street Journal, the Financial Times, the financial section of the New York Times, etc.?

Never _____ Occasionally _____ Often _____

Do you read financial magazines, such as Money Magazine, Business Week, Forbs, etc.?

Never _____ Occasionally _____ Often _____

Do you watch financial programs, such as Nightly Business News, CNBC, Wall Street Week with Louis Rukeyser, etc.?

Never _____ Occasionally _____ Often _____

Your Comments: