



FINA5329-001: Portfolio Management and Security Analysis (3 Credit Hours)

Summer 2018

Instructor: Yibing Du, PhD, FRM

Office Number: College of Business 628

Office Telephone Number: 817-272-3705

Email Address: yibing.du2@uta.edu (Email is preferred for communication)

Faculty Profile: <https://mentis.uta.edu/explore/profile/yibing%20-du>

Office Hours: By appointment

Section Information: The use of economic and accounting data in the selection of securities. Examination of current and traditional techniques used by investment practitioners. Prerequisite: FINA 5311 and FINA 5323.

Time and Place of Class Meetings: COBA251, Monday and Wednesday 5:30-7:50PM

Description of Course Content: FINA5329-001 Portfolio Management and Security Analysis focuses on the application of investment portfolio theories, portfolio management strategies and techniques for both individual and institutional investors. The course covers three important areas of portfolio management: 1) Investment and portfolio theories, which include asset pricing theories, portfolio diversification theories under mean-variance framework, and market behavior theories. Investment theories lay the foundation for designing and implementing right portfolio management strategies; 2) Security analysis and security valuation, they are nuts and bolts portfolio construction and portfolio rotation. Main stream security analysis methods on equity, fixed income and derivative securities will be discussed; 3) Portfolio management strategies and techniques. Successful investment is the result of a well designed investment process and a good practice of investment theories and strategies. In a competitive market, however, outperforming peers and benchmarks is much more challenging. Performance evaluation is the key to understand a portfolio manager's skill and sources of return generation. In addition to traditional investment theories and portfolio management practice, this course will also introduce current trends in investments, such as factor investing.

Student Learning Outcomes: FINA5329-001 Portfolio Management and Security Analysis is an advanced graduate course for finance and MBA students. Developing skills of identifying, analyzing and solving investment and portfolio management problems is the main purpose of this course. After studying this course students should acquire the knowledge and skills of developing solutions to individual or institutional clients' investment requirements.

- 1) To be familiar with investment industry, capital markets, asset classes and financial securities;
- 2) To understand the investment process starting from clients' objectives to portfolio construction and performance evaluation;
- 3) A good capture of modern investment/portfolio theory, especially the relationship between risk and return, portfolio diversification, and return decomposition;
- 4) To understand functions of capital markets and the mechanism of how asset prices are determined.
- 5) To develop skills of asset valuation;
- 6) To develop skills of market research and security analysis on stocks, fixed-income and derivatives securities;
- 7) To understand and develop portfolio management strategies;

- 8) To understand investment risks and develop skills of portfolio risk management;
- 9) To evaluate portfolio performance and perform attribution analysis.

Required Textbooks and Other Course Materials:

1. Required Text: "Investment Analysis and Portfolio Management" by Frank Reiley and Keith Brown, South-Western/Cengage Learning Publisher 2011, 10th edition, ISBN-13:978-0538482387;
2. Recommended Text: "Investments" by Bodie, Kane, and Marcus, McGraw-Hill Irwin publisher 2014, 10th edition, ISBN-13:978-0077861674;
3. Other recommended materials: Wall Street Journal, Bloomberg News and Markets, Yahoo Finance, Google Finance;
4. Technical Requirements: Calculators: TI BAII (Plus)/Professional or HP 12C financial calculators, Laptop, Microsoft Office, Computer Lab or Internet Connections.

Descriptions of major assignments and examinations:

The course consists of classroom lectures, portfolio project, journal paper reading, student presentation, spreadsheet exercises, one mid-term exam and one final exam. Students are required to form study groups to complete portfolio project, journal paper reading and presentation.

1. Exams: One mid-term exam and one final exam.

2. Group Project: Projects listed below are teamwork required and group based. Students are required to form study groups to complete portfolio project, journal paper reading, and presentation of your work.

2.1 Portfolio simulation project: At beginning of the semester each group starts to design and implement an investment portfolio based on the assigned investment objective, investment style and the benchmark. You are expected to evaluate your portfolio performance at end of the semester and write an analysis report of your investment portfolio project. (See Appendix 1 for portfolio project guideline)

2.2 Reading assignments: Journal papers are also assigned to each group. Each group need to write synopsis of the assigned papers. (See Appendix 2 for guideline of journal paper reading);

2.3 Presentation: At end of the semester each group is expected to present both portfolio project report and reading synopsis to the class. (See Appendix 3 for presentation guideline)

3. Spreadsheet Exercises: End of chapter spreadsheet exercises are assigned to help develop quantitative analysis skills. Students should work on these spreadsheet assignments independently and email to the instructor by the due date. (See Appendix 4 for spreadsheet exercise guideline)

4. Class participation: Class participation is part of final grade.

Attendance: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I have established following attendance policy: Students enrolled in this course are expected to attend each class with homework and reading assignments completed. Any student who must miss a class is responsible for securing all class materials and assignments for coursework missed. Class roll will be randomly called during class meetings.

Course Policy: 1. During class meetings non-class activities are refrained in the classroom. These may include, but are not limited to, silencing cell phones, etc.

2. Students are encouraged to participate in interactive discussions and ask questions;

3. In case the instructor is late for more than 15 minutes, please leave the classroom quietly;

4. Students should check your UTA e-mail account for any important updates from the instructor; Students are responsible for any missed class materials and assignments;

5. All exams are mandatory with closed book and notes;

6. UTA IDs must be in front of the students at all times during exams;

7. Formula sheet will be provided for exams by the instructor;

8. Students must bring their own Scantron form 882-ES and financial calculators. Programming-enhanced calculators are not permitted in the exam.

9. The instructor may relocate students in the exam room.

10. Academic honesty is a must in this course. Any misconducts or dishonesties might result in an automatic F and/ or appropriate disciplinary action.

Grading: Class performance is evaluated by a weighted average of exams, spreadsheet exercises, group project, and class participation. Group project is composed of case studies, research paper readings, and presentation. Extra credits: Bonus questions will be offered on exams.

GPA Composition	Weights	Scale	Letter Grade
Mid-term Exam	25%	89.50-100.0	A
Final Exam	30%	79.50-89.49	B
Spreadsheet Exercises	10%	69.50-79.49	C
Group Project		59.50-69.49	D
Portfolio project	15%	0-59.49	F
Journal paper reading	10%		
Presentation/Participation	10%		

Make-up Exams: Make-up exam could be scheduled for students who contact the instructor at least one week prior to the scheduled exam date with a valid reason.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least 6 hours per week on course related activities, including reading required materials, completing assignments, preparing for exams, working on project, etc.

Grade Grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. For undergraduate courses, see <http://catalog.uta.edu/academicregulations/grades/#undergraduatetext>; for graduate courses, see <http://catalog.uta.edu/academicregulations/grades/#graduatetext>. For student complaints, see <http://www.uta.edu/deanofstudents/student-complaints/index.php>.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.*

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at <https://www.uta.edu/conduct/>.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: for semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities. Evacuation plans may be found at

http://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_Buildings.php.

In the event of an evacuation of the College of Business building, when the fire alarm sounds, everyone must leave the building by the stairs. All those in the North tower side of the building should proceed to the fire escape stairs located on the East and West sides of that wing. With the current fire alarm system, the elevators will all go to the first floor and stay there until the system is turned off. For Disabled Persons: Please go to the Northeast fire stairs. There is an evacuate track chair located on the 6th floor stairwell. There are people trained in the use of this chair and there will be someone who will go to the 6th floor to get the chair and bring it to any lower floor stairwell to assist disabled persons. Should this be a real emergency, the Arlington Fire Department and UTA Police will also be here to help.

Students should also be encouraged to subscribe to the MavAlert system that will send information in case of an emergency to their cell phones or email accounts. Anyone can subscribe at

<https://mavalert.uta.edu/> or <https://mavalert.uta.edu/register.php>

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include [tutoring](#), [major-based learning centers](#), developmental education, [advising and mentoring](#), personal counseling, and [federally funded programs](#). For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

The IDEAS Center (2nd Floor of Central Library) offers **free** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

Course Schedule (Tentative)

Week	Date	Weekday	Important dates	Lecture Topics
Week1	6/4/2018	M	First day of class	Syllabus
	6/6/2018	W		Module 1: Investment and portfolio theory revisited(1)
Week2	6/11/2018	M		Module 1: Investment and portfolio theory revisited(2)
	6/13/2018	W		Module 2: Portfolio construction (1)
Week3	6/18/2018	M		Module 2: Portfolio construction (2)
	6/20/2018	W		Module 3: Security analysis and portfolio theory (1)
	6/21/2018		Census date	
Week4	6/25/2018	M		Module 3: Security analysis and portfolio theory (2)

	6/27/2018	W		Module 4: Portfolio management (1) *Portfolio Simulation beginning date (Portfolio project starts; Portfolio construction and all trades have to be placed)
Week5	7/2/2018	M	Mid-term Exam	Mid-term Exam
	7/4/2018	W	Independence Day	No class
Week6	7/9/2018	M		Module 4: Portfolio management (2)
	7/11/2018	W		Module 5: Portfolio risk management (1)
Week7	7/16/2018	M		Module 5: Portfolio risk management (2)
	7/18/2018	W		Module 6: Evaluating the investment process (1)
	7/19/2018		Last day to drop	
Week8	7/23/2018	M		Module 6: Evaluating the investment process (2) *Portfolio Simulation end date
	7/25/2018	W		Presentation
Week9	7/30/2018	M	Last day of class	Presentation/Review
	8/1/2018	W	Final Exam	Final Exam

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Appendix 1: Guideline on portfolio simulation project

1. The purpose of portfolio project is to get students familiar with the investment process, developing solutions for clients' investment requirements, and acquire first hand practice experience of investment practice.
2. Each group will be assigned a benchmark by your client's requirement. You are going to construct a portfolio to outperform the benchmark when the portfolio simulation ends.

Portfolio Styles			
	Small Cap	Mid Cap	Large Cap
Value (P/E)	≤ 20	≤ 25	≤ 30
Growth (P/E)	> 20	> 25	> 30
Market Cap	< 1 bil	1 bil-5bil	> 5 bil
Benchmarks			
Dow Jones Industry Average	Group 1	overall market index	
S&P500	Group 2	overall market index	
Russell 1000 index	Group 3	overall market index	
Russell 2000 index	Group 4	small cap index	
Russell 3000 index	Group 5	large cap index	

3. The portfolio simulation starts at 6/27/2018 and ends at 7/23/2018. Each group is expected to start benchmark analysis, portfolio optimization, asset allocation, security analysis/selection immediately when study groups are formed.
4. All trades have to be placed on/before 6/27/2018. During the portfolio simulation 6/27/2018 to 7/23/2018, you may either apply buying and holding strategy or rebalancing your portfolio as needed. Remember if you rebalance your trades during the simulation, the trades have to be placed before 7/23/2018.
5. Portfolio project report:
 - 5.1 Part 1(one page): section 1, Market outlook: include your assessment of the market outlook. This should include a summary of your prognosis of the general state of economy. Include pertinent indicators such as CPI, GDP, interest rates, and others appropriate. How does this market outlook affect your investment style?
Section 2: Portfolio objectives: Quantify your selection for each of the following: projected earnings growth, PE ratio, beta, dividend yield and other criteria you deem appropriate.
 - 5.2 Part 2 (one/two pages): section 3, Asset allocation and portfolio weights. Use a spreadsheet to calculate the asset allocation and portfolio weights based on benchmark or your portfolio construction criteria (Approximation is fine, no accurate calculation is required). Justify the reasoning behind your asset allocation calculation. Select the securities meeting your asset allocation criteria, such as PE, beta, growth etc. Include a spreadsheet to record all companies you traded with their screen criteria listed each row.
 - 5.3 Part 3 (one page): section 4, record your portfolio return and the benchmark return as of every Friday each week. Did your portfolio outperform its benchmark? Calculate Sharpe, Treynor, and Jensen's measures for your portfolio against benchmark. How well is your portfolio doing compared with the benchmark weekly/daily? Do you plan to rebalance your portfolio?
 - 5.4 Part 4 (one page): section 5; perform a style analysis for your portfolio. This will be a regression of your daily portfolio returns against the seven investment styles. What is your portfolio's management style? What other investment styles did your portfolio emulate? Report your findings and conclusions.
 - 5.5 Part 5 (one page). Section 6. Portfolio analytics comparison. Download your portfolio and benchmark analytics from the simulation website. Make figures to visualize the comparison of your portfolio and the benchmark, what is the implication of your management skills from analytics comparison?

Appendix 2: Guideline on journal paper reading

1. Two journal papers will be assigned to each group. Read the papers and write reading synopsis for each paper. The synopsis should include:
 - Summary of the paper (research questions and conclusions)
 - Hypothesis of the paper
 - Data and methodology
 - Study/or test results
 - Implication of the paper

Appendix 3: Guideline on group presentation

1. Each group is required to present group work of portfolio simulation project and journal paper readings to the class at scheduled times.
 - Portfolio project presentation: each group should prepare presentation slides for portfolio project and time of the presentation should be limited within 30 minutes.
 - Journal paper reading presentation: slides of reading synopsis should also be prepared and time of the presentation also is limited within 30 minutes.
 - Please remember to email me the slides before your presentation.
2. Both portfolio project report and reading assignments are due at last day of the class (due date 7/30/2018). Each group please submits printed portfolio project report, reading synopses and presentation slides to the instructor in class.

Appendix 4: Guideline on spreadsheet exercises

1. Spreadsheet exercise will be assigned after each lecture topic.
2. At last day of the class (7/30/2018) electronic copies of spreadsheet exercises should be emailed to the instructor.