APPLIED INVESTMENT ANALYSIS [MSFA 723] SPRING 2015

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Office Hours: Monday 4:00 – 5:00 PM and 9:30 - 10:30 PM or by request.

Class Hours & Location: Monday, 5:00 P.M., 452 Howard.

<u>Course Structure</u>: This course will be divided into three major components. The first component is to learn to acquire financial data from Bloomberg, CRSP, Compustat and other sources and to integrate it with STATA, MATLAB, and Excel. The second component of the course is to write code to test and investigate a potential theory, trading strategy, or valuation technique. The third component is to produce a research paper and power-point presentation that may be eventually shown to a financial company in the San Francisco area.

Course Description: This course emphasizes the needs and processes that underlie good financial market research so students can apply their financial knowledge to actual data and actual projects. In the spirit of our Masters program, we will attempt to work with financial companies with latent research needs. Through these projects, students will acquire hands-on knowledge of the sorts of problems that financial companies are currently grappling with as well as the potential to make connections with these companies for potential employment prospects.

<u>Prerequisites:</u> Students must have completed MSFA 720 (equity valuation), MSFA 722 (fixed income valuation), and MSFA 736 (econometrics). Students also should be familiar with Bloomberg (usage as well as data downloading), STATA (the statistical programming language), MATLAB (the programming language), and Excel. For Bloomberg, students must have passed the Bloomberg Certification¹.

¹ See final page of the syllabus for instructions on how to obtain this certificate.

Companies Involved in Program²:

These are companies that may participate in the University of San Francisco MSFA program's Applied Investment Analysis course. These companies will send us a group of research projects, which we will complete in teams and deliver a final paper summarizing our results to them.

- 1. Blackrock
- 2. Charles Schwab

Industry Licenses:

Students are strongly encouraged to enroll in the CFA program (www.cfainstitute.org) or in the MTA program (www.mta.org). The first program is the Certified Financial Analyst pedigree, while the second is a Chartered Market Technician's pedigree. These are credentials that are increasingly being attained by people in the financial industry. Much of the material in this course will overlap with the study guide of the CFA.

Required Software:

All students should purchase their own copy of MATLAB and STATA. They should also have access to Excel and Bloomberg.

MATLAB:

https://www.mathworks.com/store/link/products/student/new;jsessionid=6 la74fe5alleb80afdbc615f6c86?s iid=htb buy gtwy cta3 (Choose MATLAB MATLAB and Simulink Student Suite plus the econometrics and financial toolbox)

STATA:

http://www.stata.com/order/new/edu/gradplans/student-pricing/ (Choose STATA/IC Perpetual License)

² The companies may change from year-to-year.

Reading Materials: Books³:

Success in this course involves a commitment to a fair amount of reading from a wide variety of sources besides the ones that are required outside of class hours. The professor will routinely distribute new articles of reading every semester. These books can be purchased from the USF bookstore or online.

1. Chincarini, Ludwig B. and Daehwan Kim. Quantitative Equity Portfolio Management. New York, McGraw-Hill, 2006.

http://www.amazon.com/Quantitative-Equity-Portfolio-Management-Construction/dp/0071459391/ref=sr 1 1?ie=UTF8&qid=1343182510&sr=8-1&keywords=quantitative+equity+portfolio+management

2. Chincarini, Ludwig B. The Crisis of Crowding. Quant Copycats, Ugly Models, and the New Crash Normal, Wiley, 2012.

http://www.amazon.com/The-Crisis-Crowding-Copycats-Bloomberg/dp/1118250028/ref=sr 1 1?ie=UTF8&qid=1339689840&sr=8-1&keywords=the+crisis+of+crowding

Reading Materials: Non-Required Books⁴:

- 1. Tuckman, Bruce and Angel Serrat. Fixed Income Securities, Wiley-Finance, 2012.
- 2. Zacks, Leonard. *The Handbook of Equity Market Anomalies*, Wiley-Finance, 2011.
- 3. Moore, Keith M. Risk Arbitrage. An Investor's Guide, Wiley-Finance, 1999.
- 4. Yamarone, Richard. *The Trader's Guide to Key Economic Indicators*, Bloomberg Financial, 2012.
- 5. Damodaran, Aswath. The Dark Side of Valuation. Valuing Young, Distressed, and Complex Businesses, FT Press, 2010.
- 6. Templeton, Lauren and Scott Philips. *The Market-Beating Strategies of Value Investing's Legendary Bargain Hunter*, McGraw-Hill, 2008.

³ These books should be purchased by every student either in the bookstore or online.

⁴ One copy of each of these books will be reserved for student usage. However, students may wish to buy their own copies of some of these books.

- 7. Benninga, Simon. Financial Modeling, MIT Press, 2008.
- 8. Stefanini, Filippo. Investment Strategies of Hedge Funds, Wiley, 2006.
- 9. Hooke, Jeffrey. Security Analysis and Business Valuation on Wall Street, Wiley-Finance, 2010.

Reading Materials: Newspapers & Periodicals:

- 1. The Wall Street Journal* (read on daily basis)
- 2. Barrons* (read on weekly basis).
- 3. The Economist (optional).
- 4. Forbes
- 5. Fortune
- 6. Financial Analysts Journal (available through the library)
- 7. *Journal of Portfolio Management* (available through the library)
- 8. Latest Working Papers in Finance (www.ssrn.com)

Reading Materials: Websites*:

- 1. Bloomberg (www.bloomberg.com & terminals)
- 2. Moodys (www.moodys.com)
- 3. Standard and Poors (www.standardandpoors.com)
- 4. General Finance Resources (http://ludwigbc.com/research/finance-resources/)
- 5. Hoovers. (www.hoovers.com) Financial information on 10,000 companies
- 6. Value Line Investment Survey (http://www.valueline.com)
- 7. S&P Industry Surveys (http://www.standardandpoors.com/products-services/industry_surveys/en/us)
- 8. S&P The Outlook (http://www.standardandpoors.com/products-services/outlook/en/us)
- 9. Yahoo Finance (finance.yahoo.com) Security information and quotes.
- 10. American Association of Individual Investors (www.aaii.com) Basic information on investing and strategies.
- 11. The SEC. (www.sec.gov) All SEC information on all publicly traded companies.

^{*}Discount order forms available from instructor.

- 12. The Financial Web. (www.finweb.com) Links to all sorts of basic financial information.
- 13. Finance on Internet (http://people.ischool.berkeley.edu/~hal/pages/finance.html) Links to financial databases, journals, working papers, etc.

<u>The Honor Code</u>: As a Jesuit institution committed to cura personalis- the care and education of the whole person- USF has an obligation to embody and foster the values of honesty and integrity. USF upholds the standards of honesty and integrity from all members of the academic community. The Honor Code can be found at: http://www.usfca.edu/fogcutter. Plagiarism on group projects or cheating on quizzes or exams will result in deferral to the appropriate disciplinary authority. The CFA code of conduct can be found: http://www.cfainstitute.org/ethics/codes/ethics/Pages/index.aspx.

<u>Disability</u>: Students are encouraged to inform the instructor of any disabilities that may impair their ability to learn.

<u>Lateness and Attendance</u>: Missed exams, late papers, and absenteeism can reduce a student's grade up to the discretion of instructor.

Course Requirements and Grading:

Final Project: 75%
Participation: 15%
Company Vote: 10%

^{*}Many of these are available from the USF library.

Course Outline

Meeting Date	Topics	Readings	Important Events
March 23, 2015	Introduction	QEPM, All Chapters	
	Discuss Projects and Understand		
	 Choose groups and projects 		
	Programs and Data		
	 Set students up, tutorials on data and research 		
	• Students begin working on plan for project		
March 30, 2015	Research Techniques	QEPM, All Chapters	
	 Tutorials on how to do good research 		
	Student Research with Guidance		
	Divide tasks and specialize		
	• Set goals and tasks for week		
April 6, 2015	Research Techniques	QEPM, All Chapters	
	 Tutorials on how to do good research 		
	Student Research with Guidance		
	 Divide tasks and specialize 		
	• Set goals and tasks for week		
April 13, 2015	Research Techniques	QЕРМ, All Chapters	
	 Tutorials on how to do good research 		
	Student Research with Guidance		
	 Divide tasks and specialize 		
	• Set goals and tasks for week		
April 20, 2015	Research Techniques	QEPM, All Chapters	
	 Tutorials on how to do good research 		
	Student Research with Guidance		
	Divide tasks and specialize		
	• Set goals and tasks for week		
April 27, 2015	Research Techniques	QEPM, All Chapters	
	Tutorials on how to do good research	1	
	Student Research with Guidance		
	Divide tasks and specialize		
	• Set goals and tasks for week		
May 5, 2015*	Presentation to Company and Final Projects Due		
* Due date of project	ct will be this date, however, the presentation to the company ma	av take place on another dav	

Bloomberg Certification Instructions

Before starting the certification program, you must first create your own login name. After starting Bloomberg, hit the red <DEFAULT> key to get to the login screen. Leave the fields blank and hit the green <GO> key. Follow the prompts provided to create your own login. NOTE: Once you create your login it needs to be validated before it can be used. You will need to have access to your mobile phone. Bloomberg will call and/or send you an email with a phone number to call. Once you have activated your Login you can start the certification program. The program consists of two parts—the core videos and the market sector videos.

- Core videos: Getting Started, Bloomberg News, Market Monitors, and Launchpad/API
- Market sectors: Equity, Fixed Income, FX, and Commodity

There will be one exam to cover the Core and each Market Sector has an exam. You do not need to follow any specific order (i.e. there is no requirement to complete the Core first). To pass a course, you must score at least 75% on the exam. There are no re-takes. Plan accordingly. If you fail an exam, there is a way to begin the entire certification process over from scratch. See me with questions.

Note: You will be watching videos so you will need to bring your own headphones which can be plugged into the back of the Bloomberg keyboard.

To start the process:

- 1. Type BESS <GO>.
- 2. Select the video you want to watch (i.e., Getting Started).
- 3. After viewing all the required video, you will need to request an exam. It is recommended that you take the exam within 24 hours of completing the video. To get an exam:
 - (a) Type BESS <GO>.
 - (b) Type 6 <GO> (Exams Enablement).

Once you have completed and passed the core exam and all four of the market sector exams, contact the HelpDesk to request the Acknowledgement of Completion. (Note: you should keep track of the date you take the exam and your score so that you have a record that you can provide if requested.)