**Theory of Financial Markets**

*Monroe Hall: Room 262*

*1900 Arlington Blvd; Suite C (This is the more likely location, except on “Garden Room Lunch” days)*

*212 731-2340  (etb6d@virginia.edu)*

*Office Hours: Tues/Thurs 11-12 AM in Monroe Hall, Room 262*

Class will meet on **Tuesdays and Thursdays** from **9:30 AM until 10:45 AM** in the main **Wilson Auditorium**.   This is a considerable amount of reading in this course.

**Main Topics Covered In This Course Are:**

1. Fixed Income Markets
2. Modern Portfolio Theory
3  Leverage, Corporate Balance Sheets, Buyouts
4. Alternative Assets

**Schedule:**

Tuesday, August 23, 2016: [Introduction to Debt & Equity Markets](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect01_F16.pptx)

Reading: Chapters 1-3 in "Textbook" section of  "Resources" on  Collab for Economics 4340.

Thursday, August 25,2016: [Fundamental Concepts of Finance](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect02_F16.pptx)

Reading: Chapters 4-5 in "Textbook" section of  "Resources" on Collab for Economics 4340

[Tuesday, August 30,2016: Arbitrage: Concept and Applications](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect03_F16.pptx)

Thursday, September 1, 2016: Class Cancelled (Prof Burton in Nashville, Tennessee)

[Tuesday September 6, 2016: Debt vs Equity; Bankruptcy](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect04_F16.pptx)

Reading: Chapters 6-7 in "Textbook" section of "Resources" on Collab for Economics 4340

[Thursday, September 8: Equity-Debt, Diversification](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect05_F16.pptx)

[Tuesday, September 13, 2016: US Treasury Market - Part I](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect06_F16.pptx)

[Thursday, September 15, 2016: More on Treasury Auctions](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect07_F16.pptx)

[Sept 13, 2016 Auctions](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Sept-13-16-Auctions.pdf)

Tuesday, September 20, 2016: Calculating Yields on Treasury Bills and Bonds (see Resources section on Collab, Lect\_08)

Thursday, September 22, 2016: Final Thoughts on US Treasuries; Beginning of Markowitz and an Intro to the Capital Asset Pricing Model (see Resources section on Collab, Lect\_09)

[Tuesday, September 27,2016: Intro to Markowitz Variables](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect10_F16.pptx)

Thursday, September 29, 2016: **First Mid-Term Examination** (covers lectures through Sept 27th, Random Walk Down Wall Street, first 7 chapters of book on Resources at Collab site plus all powerpoint presentations through Sept 27th). Exam held at regular class time in the Wilson Auditorium; 9:30 - 10:45 AM.

[Thursday, October 6, 2016: Markowitz Mean-Variance Theory](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect11_F16.pptx)

Reading: Chapters 8-9 in "Textbook" section of "Resources" on Collab for Economics 4340

[Tuesday, October 11, 2016: Tobin and The Capital Asset Pricing Model](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect12_F16.pptx)

[Thursday, October 13, 2016: CAPM Summary](http://pages.shanti.virginia.edu/ETB_Website/files/2016/05/Lect13_F16.pptx)

**Reading Materials:**

Note:  It will be assumed from the first lecture forward that all students have read Malkiel’s “Random Walk Down Wall Street.”  If you have not read Malkiel, then read it as soon as possible.

***Random Walk Down Wall Street***, by Burton Malkiel (this book should be read first and completed during the first few lectures in the class)

The following books are suggested (for those who really want to go far beyond this course):

***Investment Science***, by David Luenberger [Oxford, 1998]  {this is a very mathematical treatment of modern finance and will only be readable by mathematically experienced students}

Security Analysis, by Benjamin Graham and David Dodd [McGraw Hill, 1934 Edition] {This is the bible for value investors}

The Following Are Classic Articles in Finance That Will Be Referenced in Lecture:[“Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk,” by William F. Sharpe, Journal of Finance, September, 1964](http://pages.shanti.virginia.edu/ETB_Website/files/2015/07/Sharpe-1964.pdf)

[“Risk, Return and Equilibrium: Some Clarifying Comments,” by Eugene F. Fama, Journal of Finance, 1968.](http://pages.shanti.virginia.edu/ETB_Website/files/2015/07/Fama-1968.pdf)

**Websites relevant to US Treasury Market:**

For definition of bills, notes, bonds: <http://www.treasurydirect.gov/indiv/products/products.htm>

For answering questions about who owns the national debt in the US: http://www.treasurydirect.gov/govt/reports/pd/mspd/2016/2016\_aug.htm

Information about upcoming US treasury auctions (over the next six months or so): <http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/documents/auctions.pdf>

General location of debt information at the US treasury: <http://www.treasurydirect.gov/NP/debt/current>

Debt to GDP and other economic information (in time series format and graphic format), Federal Reserve Bank of St. Louis research department:

<http://research.stlouisfed.org/fred2/release?rid=263>

History of Treasury Auctions and Upcoming Treasury Auction Schedule: <https://www.treasurydirect.gov/instit/annceresult/annceresult.htm>

**Websites for Mathematical Terms**

[Mean](http://en.wikipedia.org/wiki/Mean)

[Variance](http://en.wikipedia.org/wiki/Variance)

[Covariance](http://en.wikipedia.org/wiki/Covariance)

[Correlation\_Coefficient](http://en.wikipedia.org/wiki/Pearson_product-moment_correlation_coefficient)

**Lectures:**

**Examinations:**

There will be two mid term examinations and one final examination,with the final grade determined by a weighting of 30/30/40 with the final amounting to 40 percent. The final examination is cumulative. The final examination is scheduled for Tuesday, December 13, 2016 beginning at 2 PM and ending at 5 PM.  The examination will be held in the Wilson Auditorium. **No examination may be skipped without a bona-fide excused absence (illness, etcetera).  There is no option available for missing exams.**There will be grading reviews held for each of the two mid term examinations **(the final examination cannot be reviewed except for numerical mistakes in adding up the grade).**The grading reviews for mid term exams are normally a two hour office period held within ten days after the exams have been distributed back to students in class. It is the student’s responsibility to pick up their exam in class or arrange to pick it up at a later date. In order to have an exam reviewed, the student must show up with their exam in hand at the review. If a student cannot attend the review session, they must contact the grader prior to the review office hours and arrange an alternate date for the review.

**Exam Schedule:**

Examination I – Thursday, September 29, 2016

Examination II – Thursday, November 10, 2016

Final Examination – Tuesday, December 13, 2016 2PM – 5PM, Wilson Auditorium

***Please Note: If you cannot make the examinations as scheduled, please do not take this course. We do not give make-up examinations. If you are unable to take the final on time as schedule, you will, at best, receive an incomplete for this course. There are no exceptions.***