# Econ 423: Financial Markets

UNC at Chapel Hill, Department of Economics Spring 2016



### Instructor Information:

Mike Aguilar

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Office Hours: T,R 5-6pm

### Class Schedule:

Section 001 T,R 3:30pm-4:45pm Gardner Hall Rm 307

#### Communication:

Assignments, announcements, grades, readings, and other information will be posted on sakai. The sakai site will be the primary method of communication for this course, so please check it frequently.

## Recommended Prerequisite:

Econ 420 (Intermediate Theory: Money, Income, and Employment)

Econ 400 (Economic Statistics)

### Course Materials:

## Recommended Texts:

- Investments by Bodie, Kane and Marcus; McGraw Hill Publishing.
- The Economics of Money, Banking, and Financial Markets by Mishkin; Pearson Publishing.
- Modern Investment Theory by Haugen; Prentice Hall.

**Recommended Periodicals:** Keeping abreast of the financial and macro news is essential for this course. Although not officially required, reading the The Wall Street Journal and/or the Economist is highly recommended.

**Software:** You are not required to purchase additional software for this course. However, many assignments require access to a program that will store and manipulate data. Excel is the usual candidate for such tasks. Other programs such as SAS, Matlab, Stata, etc.. also are acceptable.

**Code of Conduct:** The University Honor Code is in effect. In particular, this implies that all work submitted is your own. Moreover, I expect professional behavior at all times. For example, the non-academic use of personal electronic devices is prohibited.

Grading	% of Course Grade	Date	Details & Policy
Final Exam	(20%)	04/30/16 4pm-7pm	Comprehensive exam. Missing the
			Final Exam without a valid excuse
			from the Dean will result in a zero
			exam score.
Midterm	(20%)	03/03/16	Missing the Midterm without an
			"excused" absence results in a zero
			score for this Test. If you miss the
			Midterm with an "excused" absence,
			the Final Exam will account for 40%
			of the course grade.
Homework	(35%)	TBD	There will be several homeworks
			throughout the semester. No late
			assignments will be accepted. No
			"make-ups" will be given. If you miss
			an assignment due to an "excused"
			absence, your Homework grade will be
			reweighted among the remaining
			homework assignments.
Macro-Strategy Portfolio		Semester-long, group portfolio management exercise.	
Report to CIO	(15%)	As per course calendar	A weekly summary of market, macro,
			and policy activity. Discuss how these
			events impacted your portfolio, and
			how you will position your portfolio in
			the coming week. Submitted electroni-
			cally via email.
VC Roadshow	(10%)	TBD	Your goal is to acquire venture capi-
			tal (VC) funding. Each group must
			prepare a thorough accounting of their
			team's activity during the semester,
			present their outlook to the class, and
			turn in a full written report. Submitted
			electronically via email.

Students associated with Disability Services must contact me one week prior to each Test.

Excused Absences: Illness or participation in University sanctioned activities. Documentation from coach or doctor must be provided. You must fill out the "Excused Absence" form found on the course site, and turn it in to me as soon as possible.

Letter grades are computed from the total points earned during the semester and assigned based on the scale nearby. There is no maximum number of A's nor B's awarded. However, in previous courses 15%-20% of my students have earned in the A range, 30%-50% have earned in the B range, and 20%-30% have earned in the C range. Although the grade distribution may change this semester, the past scores should give you a sense of my grading standards.

A	$x \ge 95\%$
A-	$90 \le x < 95$
B+	$85 \le x < 90$
В	$80 \le x < 85$
В-	$75 \le x < 80$
C+	$70 \le x < 75$
$\mathbf{C}$	$65 \le x < 70$
C-	$60 \le x < 65$
D+	$50 \le x < 60$
D	$40 \le x < 50$
F	x < 40

#### Course Goals:

This course examines the roll of financial markets and institutions within the economy. We begin with an overview of the financial system, emphasizing the importance of the financial markets to the health of the macro-economy. We then detail the market for, and pricing of, several financial instruments, including fixed income, equity, and foreign exchange. The course then explores the role of financial institutions as intermediaries and their role in the recent credit crisis. By the end of the course students should i) be able to use the concept of present value to price streams of income, ii) be able to analyze the impact of monetary policy changes upon the economy in general, and financial markets in particular, and iii) have a deeper understanding of the recent financial crisis and the potential impact of proposed remedial actions.

3

# Tentative Course Outline:

Week 1	Introduction to Financial Markets & Trading Platform		
	What are the financial markets? How are trades placed inside of our platform?		
Weeks $2-3$	Performance Measurement		
	What are the best practices for computing and describing returns?		
Weeks $3-4$	Understanding the Risk / Return Tradeoff		
	What is risk? How measure? How do investors allocate in teh face of risk		
Weeks $5-6$	Asset Allocation		
	Why is diversification useful? How do we construct Markowitz-style optimal portfolios?		
Weeks $6-7$	Risk Free Asset Pricing		
	What is the price of an asset in the simple case of no risk?		
Weeks $8-10$	Asset Market Equilibrium		
	How do the CAPM and APT models permit investors to price assets in the face of risk?		
Weeks 11-14	Asset Pricing		
	How do investors price Equities, Fixed Income, and Foreign Exchange?		
Week 15	Macro & Markets		
	What is the interaction between the financial markets and the macroeconomy?		

## Macro-Strategy Portfolio Exercise:

Welcome to Aguilar Macro-Strategy (AMS), a global macro hedge fund located here in Chapel Hill, NC. We are a "top-down" shop, meaning that we look to the macro-economy and policy environment to inform our trading decisions. You are the newest member of our fund family. Along with a few of your classmates, you will form a portfolio management team. Each team roughly will consist of 8-15 students.

Since our focus is "top-down", the investable universe for each team is a sampling of macro-based ETF's. I will make the list available to students during class. Each team's mandate is to outperform the S&P500. Each team is seeded with \$1,000,000 at the opening bell 01/18/2016 EST, and all positions must be cashed out by the close of trading 04/25/2016. All other information regarding trading platform, rules, and regulations will be made available in class and posted on sakai.

Report to CIO: Each team must submit a weekly report to me (the CIO of AMS), which contains four key elements: i) Week in Review: An overview of the markets, economy, and policy environment in the previous week. ii) Performance Summary and Holdings: Detail the performance of your portfolio during the previous week and since inception. Include simple metrics such as mean return and standard deviation relative to your benchmark. Also include a detailed accounting of the weights for each of your holdings. iii) Summary of Activity: justify each of your (non)trading decisions from a macro-perspective. Note: the decision to hold an asset requires as much justification as does a buy or sell action. iv) Outlook: Describe how you plan to position the portfolio for the coming week. [I expect weekly reports to be 5-10 pages in length]. Each week a group will present their report(s) to the class.

VC Roadshow: You are seeking to acquire funding from venture capital investors. Each team must give a 20-30 minute presentation on why you are deserving of their money. The presentation will be given on the last day of classes. At the culmination of the last day, "investors" will allocate their VC dollars to the fund(s) they feel most deserving. The teams will be awarded extra credit points in proportion to the funds they raise (maximum of 1.5 extra credit points to course grade). The presentations must be supplemented with a detailed report of the fund's attributes, a semester in review, performance, a summary of activity, and outlook, as per the instructions detailed for the "Report to CIO" above. [I expect this VC Roadshow report to be 15 - 20 pages in length.]

The scores for the Macro-Strategy Portfolio Exercise will be subjected to a peer review process, wherein each student has the opportunity to evaluate their team members' contributions during the semester. The professor will take these evaluations into consideration when compiling grades for the associated assignments.