The Market: Securities and Derivatives

Course Facilitators:

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Course Description:

The fundamental goal of this course is to provide students with a comprehensive knowledge of the capital markets from an investor’s point of view in the context of current market developments. In particular, the course content is developed based on indispensable components underlying our modern day financial institutions, i.e. securities and derivatives. In this course, students will have an opportunity to understand the characteristics of underlying financial instruments, as well as the quantitative aspects designed to engineer them. Real-life examples and impacts will be stressed. No prior knowledge of or experience with financial engineering is required.

Learning Objectives:

- Understand how the market framework is developed in the context of past and current market events
- Understand who are the major participants influencing the market and their roles
- Able to explain the major markets in a qualitative and quantitative setting and their functions toward different market participants
  - Equities (stock)
  - Fixed Income
  - Commodities (with a focus on oil and gold)
  - Currencies (FX)
  - Structured Products
- Able to explain how investment banks (brokers) fit into the market, and what are the present market-related career opportunities for Berkeley students

Requirements and Recommended Prerequisites:

Access to Wall Street Journal or other market news providers. WSJ subscription may be accessed through the Business Library.

Recommended (but not required) completion of or concurrent enrollment in Introduction to Finance (UGBA 103) and Investments (UGBA 133) or preexisting knowledge of finance.
Required Readings:

Most of the assigned readings will come directly out of current market events. The instructors will highlight and guide students to the appropriate news and/or articles as deemed suitable for the learning topic at the time of the course. The required textbook, Investments, will be used mostly as a supplementary understanding of the securities and derivatives under discussion, as well as the source text for the course’s quantitative discussions.

- **Textbook: Investments 11th Edition, Zvi Bodie Professor and Alex Kane (BK)**
  - Previous editions acceptable. However, students are responsible for verifying differences between versions
- **A news source of students’ selection**
  - Recommended: WSJ, Financial Times
- **The Big Short**, movie by Michael Lewis
- **Inside Job**, documentary by Charles Ferguson
- **Selected readings from renowned texts and journal articles by the instructors (to be announced separately)**

Optional Reading: *Liar's Poker: Rising through the Wreckage on Wall Street*, Michael Lewis

Methods of Instruction:

Class will be held once a week for 110 minutes.

The course will have a strong focus on following and understanding the current market. Hence, the first 45mins of every lecture (except for first three weeks) will be dedicated to an guided open forum discussion on market developments in the past week. The rest of the lecture will be lecture-style instruction of new materials.

Grading and Evaluation:

- Participation - 50% (30% attendance, 20% class contribution)
- Trade ideas - 30%
- Reading Responses - 10%
- Quizzes - 10%

This course is offered only on a PNP basis. Student needs a minimum of 60% to pass the course.
Trade Ideas:

One of the most exciting aspects of studying the market is generating trade ideas based on your understanding of the market’s development. For example, you can propose to long (buy) gold when you think geopolitical risks, maybe another nuclear test by North Korea, will move the market towards a more conservative view (hence pushing gold price up). You can also sell (short) retail chain stocks if you believe the e-commerce revolution is eating up their market share.

Trade ideas will be evaluated on the following criteria:
1. Originality
2. Complexity (cleverly complex, not intentionally complex)
3. Execution Strategy
4. Risk Management

Students will be required to submit 3 trade ideas throughout the semester and present one during week 12.

Reading Responses:
Students are required to submit 4 short reading responses throughout the semester on the weekly articles provided by the student facilitators.

Course Timeline:

Week 1
Topic covered: Course overview / Syllabus review, Course Administration and Logistics

Week 2:
Topic covered: A History of the Market, Success and Limitations of the Market
Readings: BK Chapter 1 to 2, The Big Short

Week 3:
Topic covered: The Major Participants of the Market, Roles and Functions of Market Participants, Investment Banks - Sales and Trading, Securities and the Current Market
Readings: BK Chapter 3 to 4
Due: Reading Response

Week 4:
Topic covered: Equity Markets and Related Trade Strategies, Selected Related Current Market Events, Pricing of Equity; Commodities and Related Trade Strategies, Selected Related Current Market Events, Pricing of Commodities
Readings: BK Chapter 14 to 16
Due: Trade Idea #1

Week 5:
Quiz 1
Readings: Inside Job

Week 6:
Topic covered: Fixed Income and Related Trade Strategies, Selected Related Current Market Events, Pricing of Fixed Income; Currencies and Related Trade Strategies, Selected Related Current Market Events, Pricing of Currencies
Readings: BK Chapter 11 to 13
Due: Reading Response

Week 7:
Faculty Guest Speaker
Due: Trade Idea #2

Week 8:
Topic covered: Options, Derivatives, Exotic Products and their Trade and Pricing Strategies
Readings: BK Chapter 17 to 18

Week 9:
Topic covered: Futures and Forward Markets, Structured Products and their Origination and Function in Market
Readings: BK Chapter 19
Due: Reading Response

Week 10:
Quiz 2

Week 11:
Discussion of Recent Trends and Debates regarding the Market
Readings: BK Chapter 20

Week 12:
Student Trade Idea Presentations
Due: Trade Idea #3

Week 13:
Course Wrap-up
Due: Reading Response