NEW YORK UNIVERSITY STERN SCHOOL OF BUSINESS Debt Instruments and Markets Syllabus for FINC-GB.3333.70 Summer 2013

Professor Brian P. Lancaster* Office hours: By appointment Phone: 203-550-4804 Teaching Assistant: TBD e-mail: blancast@stern.nyu.edu

Course Description

This course will analyze important fixed income securities and markets and enable the student to understand and use key tools to value these securities including but not limited to various yields, duration, convexity, Z-spreads, option adjusted spread, total rate of return, stress testing, rolldown and breakeven analysis. In addition, interest rate risk will also be covered. The course will cover both the theory of these instruments and markets as well as the reality (squeezes, fail penalties etc).

The course covers traditional bond and term structure concepts, as well as fixed income derivatives, trading strategies and financial engineering. While all who are interested in learning about these markets are welcome to take the course, the course is particularly recommended for those wishing to pursue careers in fixed income trading, sales, research, risk and/or buyside portfolio management.

It is likely that a Bloomberg session or two will be included to enable students to get hands on experience valuing bonds and to help them have a readily applicable skill should they pursue a career in the debt markets. The outline below should give the student a good idea of the course's requirements and topics covered but is not yet finalized.

Tentative Schedule of Lectures

June 27 Course Overview, Coupon bonds and zeroes

- July 2 Yield to maturity, Duration, Immunization and Convexity
- July 9 Rate of Return, Roll Down, Breakeven Analysis

July 11 US Treasury Market (Fundamental and technical analysis - "the emperor's new clothes...)

- July 16 Forward rates and Repos
- July 18 Floating rate notes, Swaps and Swap Spreads
- July 23 Midterm, No-arbitrage pricing and Risk-neutral probabilities

July 25 Dynamic trading strategies and Financial engineering

July 30 Hedging, Options and Caps, floors and collars, American options, Callable bonds and Swaptions

*For further information on the Professor, see his resume and student evaluations of his course, Real Estate Capital Markets, taught in the fall of 2012.

- Aug 1 US Corporate Bonds (high grade and high yield)
- Aug 6 US Securitized Products (MBS, CMBS, CLOs, ABS)
- Aug 8 Final Exam

Course Materials

Required Lecture notes and problem sets Recommended

- P. Veronesi, *Fixed Income Securities: Valuation, Risk, and Risk Management*, Wiley, 2010.
- B. Tuckman, Fixed Income Securities, Wiley, 2002, 2nd ed.

Course Requirements

Grades will be based on the following. Class Participation (5%) Problem Sets (5%) Midterm (40%) Final (50%)

Exams

Closed note, closed book. Please bring a calculator.

Problem Sets

Because the material is technical and new concepts build on old ones, it will be essential to do the problem sets in order to follow the lectures and succeed on the exams. To facilitate learning and recreate a professional work situation, students will work together in teams on these problem sets. Groups of students working together should submit just one assignment. All students in the same group will get the same grade.

Academic Integrity

Integrity is critical to the learning process and to all that we do here at NYU Stern. All students are expected to abide by the **NYU Stern Student Code of Conduct**. A student's responsibilities include, but are not limited to:

• A duty to acknowledge the work and efforts of others when submitting work as one's own. Ideas, data, direct quotations, paraphrasing, creative expression, or any other incorporation of the work of others must be clearly referenced.

• A duty to exercise the utmost integrity when preparing for and completing examinations, including an obligation to report any observed violations.

Please see <u>www.stern.nyu.edu/uc/codeofconduct</u> for more information.

Students with Disabilities

Students whose class performance may be affected due to a disability should notify the professor early in the semester so that arrangements can be made, in consultation with the Henry and Lucy Moses Center for Students with Disabilities, to accommodate their needs.

Please see www.nyu.edu/csd for more information.