FINA 9200 (Phd)
Theory of Finance

Fall 2007, Tues, 3:30-6:30
Ginger Wu, 443 Brooks Hall, Phone: 2-3638, Email:jinw@terry.uga.edu
Office hours: Tuesday and Thursday 2:00-3:00pm

1. Course Overview

1.1 Objectives

This course aims to familiarize students with variety of topics in modern finance. The emphasis is on theoretical research, with special emphasis on models using the tools and techniques. The first part of the course studies asset pricing. Topics include individual decision making under uncertainty, capital market equilibrium and asset valuation, arbitrage pricing theory, consumption CAPM and efficient market. The second part of the course discusses topics in corporate finance; including capital structure and financial contracting, dividend policy, institutions and financing with asymmetrically informed investors. Empirical research in these topics will be covered in more details in courses later.

The course is designed to be the first Ph. D. course for students in Finance, Economics, Accounting and other related fields.

1.2 Class Format and Assignments

This course is very fast-paced. Reading the relative chapter of the textbook and papers that will be covered before the class is encouraged. You are required to form presentation group of 2 -3 persons and present a paper that interests you in the last day of the class.

There will be five to six problem sets which accounts for 40% of the course grade. In class presentation will be 20%. 40% of your course grade will be determined by your research proposal which is due on 12/9/2006.

1.3 References

Required:
**Copeland, Thomas E., J. Fred Weston, and Kuldeep Shastri, *Financial Theory and Corporate Policy*, Fourth Edition, Addison-Wesley, 2003. (CWS)
**Foundations for Financial Economics, By Chi-fu Huang, Robert H. Lintzenberger, Prentice Hall. (HL)
**Campbell, John Y., Lo, Andrew W., and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997

Other Reference:
Financial market and Corporate Strategy, by Mark Grinblatt and Sheridan Titman, McGraw-Hill/Irwin; 2 edition.

2. Course Outline and Reading List ***Denotes required readings*

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

2.1 First Part: Asset Pricing

Lecture 1 Tuesday August 21th
Utility Theory, Risk Aversion
**HL Ch.1, CWS Ch. 1, 3

Lecture 2 Tuesday August 28
Stochastic Dominance
**HL Ch.2 CWS Ch.3

Lecture 3 Tuesday Sep 4
Mean Variance Portfolio Analysis
**HL Ch.3 CWS, Ch. 5

Lecture 4 Tuesday Sep 11
Portfolio Separation Theorem and CAPM
**HL Ch.4
**Chapter 5, "The Capital Asset Pricing Model," in Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets,* Princeton University Press, 1997.

**CWS Ch.6

Reading listBrennan, M.J., 1989, "Capital Asset Pricing Model," in *The New Palgrave,* Eatwell, Milgate and Newman, eds., pp. 91-102.

Black, F., "Capital Market Equilibrium with Restricted Borrowing," *Journal of Business 45*, 1972, 444-455.

Stiglitz, J., 1970, "A Consumption-Oriented Theory of the Demand for Financial Assets and the Term Structure of Interest Rates," *Review of Economic Studies 37*, pp. 321-352.

Merton, R., 1973, "An Intertemporal Capital Asset Pricing Model," *Econometrica 41*, 867-888

Sharpe, W., 1964, Capital asset prices: a theory of capital market equilibrium under conditions of risk, *The Journal of Finance* 19, 425-442.

Lecture 5 Tuesday Sep 18
Portfolio Separation Theorem and CAPM---Continued
Arbitrage Pricing Theory (APT)
**HL Ch. 3, 4

Roll, R., 1977, "A Critique of the Asset Pricing Theory's Tests," *Journal of Financial Economics 4*, 129-176.

Huberman, G., 1983, "A simplified approach to arbitrage pricing theory," *Journal of Economic Theory* 28, 1983-1991.

Ross, S., 1976, "Arbitrage Theory of Capital Asset Pricing," *Journal of Economic Theory* 13, 341-360.

Lecture 6 Tuesday Sep 25
<u>Arbitrage Pricing Theory (APT)-----Continued</u>

<u>Options</u>
*Copeland/Weston, Chs. 8, 9.

*Huang and Litzenberger, Ch. 6

Chapter 9, "Derivative Pricing Models," in Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

Merton, Robert, 1973, "Theory of Rational Option Pricing," *Bell Journal of Economics and Management Science* 4, 141-183

Cox, J.C., Ross, S. and M. Rubenstein, 1979, "Option Pricing: A Simplified Approach," *Journal of Financial Economics 7*, 229-263.

Brennan, M.J., 1979, "The Pricing of Contingent Claims in Discrete Time Models" *Journal of Finance 34*, 53-68.

Black, F. and M. Scholes, 1973, "The Pricing of Options and Corporate Liabilities," *Journal of Political Economy 81*, 637-659.

Wiggins, J.B., 1987,"Option Values Under Stochastic Volatility: Theory and Empirical Estimates," *Journal of Financial Economics 19*, 351-372.

Lecture 7, Tuesday Oct 2
<u>Options---------Continued</u>

<u>The Efficient Market Hypothesis and Behavior Finance</u>
**CWS, Ch. 10, 11.

**Fama, E.F., "Efficient Capital Markets: A Review of Theory and Empirical Work," Journal of Finance, May 1969,383-417.

Fama, E., Fisher, L., Jensen, M., and R. Roll, 1969, "The Adjustment of Stock Prices to New Information," *International Economic Review 10*, 1-21.

Fama, Eugene F., "Efficient Capital Markets: II," *Journal of Finance 46*, 1575-1617.

Chapter 4, "Event Study Analysis," in Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

Chapter 1, “Introduction,” in Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

Chapter 2, “The Predictability of Asset Returns,” in Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

De Long, Shleifer, Summers and Waldmann (1990) Journal of Finance, 45, 379-395

*Daniel, Hirshleifer and Subrahmanyam (1998)JF 'Investor Psychology and Security Market Under- and Overreaction', 1839-1885

Barberis, Shleifer and vishny 'A model of investor sentiment' JFE, 1998 307-343
Delong, Shleifer, Summers and Waldmann (1990), “Noise trader risk in Financial Markets’, JPE, 98,703-738

Sleifer and Vishny 1997, JF, 52,35-55 'the limits of arbitrage'

Lecture 8, Tuesday, Oct9
De Long, Shleifer, Summers and Waldmann (1990) Journal of Finance, 45, 379-395
Daniel, Hirshleifer and Subrahmanyam (1998) Journal of Finance 'Investor Psychology and Security Market Under- and Overreaction', 1839-1885

Tuesday Oct 16 presentation

2.2 Second Part: Corporate Finance
<u>Capital Structure</u>
**CWS, Chs. 12. 15.

**Modigliani, F. and M. Miller, (1958). “The Cost of Capital, Corporation Finance, and the Theory of Investment,” *American Economic Review*, 48, 261-297.

**Grinblatt, Mark, and Sheridan Titman (1998), *Financial Markets and Corporate Strategy*, Irwin / McGraw-Hill, chapter 13.

**Harris, Milton, and Artur Raviv (1991), “The Theory of Capital Structure,” *Journal of Finance*, 46:297-355.

**Myers, Stewart C. (1977), “The Determinants of Corporate Borrowing,” *Journal of Financial Economics*, 5:147-175.

**Myers, Stewart, "The Search for Optimal Capital Structure," in *The New Corporate Finance: Where Theory Meets Practice*, Chew, ed., 1993, 142-150.

**Graham, J., Lemmon, M.L., and James Schallheim, 1998, “Debt, Leases, Taxes, and the Endogeneity of Corporate Tax Status,” *Journal of Finance 53*, 131-162.

**Welch, I., 1996, “A Primer on Capital Structure,” mimeo., also in *Finance market und Portfolio Management*.

**Ross, S. (1977), “The Determination of Financial Structure,” *Bell Journal of*

Economics, 8, 23-40.

** Leland, H. and D. Pyle (1977), "Information Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance*, 32, 371-388.

Myers, Stewart C. (1984), "The Capital Structure Puzzle," *Journal of Finance*, 39:575-592.
Miller, M. H., 1977, "Debt and Taxes," *Journal of Finance*, 261-275.

DeAngelo, H. and R. Masulis, 1980, "Optimal Capital Structure Under Corporate and Personal Taxation," *Journal of Financial Economics*, 3-30.

Titman, Sheridan, and Roberto Wessels, 1988, "The Determinants of Capital Structure Choice," *Journal of Finance* 43, 1-40.

Lecture 9, Tuesday Oct 23
<u>Capital Structure---Introduction</u>
Modigliani, F. and M. Miller, (1958). "The Cost of Capital, Corporation Finance, and the Theory of Investment," *American Economic Review*, 48, 261-297.
<u>Capital Structure— Capital Structure under Adverse Selection</u>
**Ross, S. (1977), "The Determination of Financial Structure," *Bell Journal of Economics*, 8, 23-40.

Lecture 10, Tuesday Oct 30

<u>Capital Structure— Capital Structure under Adverse Selection(continued)</u>
**Leland, H. and D. Pyle (1977), "Information Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance*, 32, 371-388.

Myers, S. and N. Majluf (1984), "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," Journal of Financial Economics, 13, 187-222

Lecture 11, Tuesday Nov 6
<u>Capital Structure----Capital Structure under Adverse Selection</u>
Myers, Stewart C. (1984), "The Capital Structure Puzzle," *Journal of Finance*, 39:575-592.
<u>Capital Structure--- Capital Structure & Financing Under Agency Costs</u>
Jensen, M. and W. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure," *Journal of Financial Economics 3*, 305-360.

<u>Dividend Policy</u>

**Miller and Modigliani, 1961, "Dividend Policy, Growth and the Valuation of Shares," *Journal of Business 34*, 411-433.

**CWS Chs. 16.

**Miller, Merton, "Behavioral Rationality in Finance: The Case of Dividends," in *The*

New Corporate Finance: Where Theory Meets Practice, Chew, ed., 1993, 151-160.

*Bhattacharya, Sudipto, (1979) " Imperfect Information, dividend Policy, and the Bird in the Hand Fallacy" The Bell Journal of Economics, 10, 259-270.

*Miller, Merton and Rock, Kevin. (1985) "Dividend Policy Under Asymmetric Information." Journal of finance, 40, 1031-1051

Litzenberger, R., and K. Ramaswamy, 1982, "The Effects of Dividends on Common Stock Prices: Tax Effects or Information Effects?", *Journal of Finance*, 429-444.

Miller, M., and M. Scholes, 1982, "Dividends and Taxes: Empirical Evidence," *Journal of Political Economy*, 1118-1141.

Allen, Franklin and Roni Michaely (1995), "Dividend Policy," in Jarrow, Maksimovic and Ziemba (eds.), Handbook of Operations Research and Management Science, Vol 9, North-Holland.

Bernheim and Wantz (1995), "A Tax-Based Test of the Dividend Signaling Hypothesis," *American Economic Review*, 85:532-551.

Benartzi, Michaely and Thaler (1997), "Do Changes in Dividends Signal the Future or the Past?" *Journal of Finance*, 52:1007-1034.

Lecture 12 Tuesday Nov 13

<u>Dividend Policy---Intoduction</u>

**Miller and Modigliani, 1961, "Dividend Policy, Growth and the Valuation of Shares," *Journal of Business 34*, 411-433.

<u>Dividend Policy—Continued</u>
Bhattacharya, Studipto (1979), The bell Journal of Economics, Vol. 10, 259-270

Lecture 13 Tuseday Nov 20
<u>Dividend Policy—Continued</u>
Miller,Merton and Rock,Kevin (1985),"Dividend Policy under Asymmetric Information." Journal of finance, 40, 1031-51.

<u>Financial Imperfections and Intermediation</u>
**Diamond, D. and P. Dybvig (1983), "Bank Runs, Deposit Insurance and Liquidity," *Journal of Political Economy*, 91, 401-419.

<u>Financial Imperfections and Intermediation reading list</u>
Stiglitz, J., and A. Weiss, (1981), "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, 71, 393-410.
Diamond, D. and P. Dybvig (1983), "Bank Runs, Deposit Insurance and Liquidity,"

Journal of Political Economy, 91, 401-419.
Diamond, D. (1984), “Financial Intermediation and Delegated Monitoring,” *Review of Economic Studies*, 51, 393-414.
Gorton, G. and G. Pennacchi (1990), “Financial Intermediaries and Liquidity Creation,” *Journal of Finance*, 49-71.
Broecker, T. (1990), “Credit-Worthiness Tests and Interbank Competition,” *Econometrica*, 58, 429-452.

Lecture 14 Tuesday Nov27

Financing with Asymmetrically Informed Investors

**Benveniste, Lawrence P., and Paul A. Spindt (1989), “How Investment Bankers Determine the Offer Price and Allocation of New Issues,” *Journal of Financial Economic*s, 24:343-361

**Rock, Kevin (1986), “Why New Issues are Underpriced,” *Journal of Financial Economics*, 15:187-212.

Lecture 15 Tuesday Dec 4   Presentations

****All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.**
The link to more detailed information about academic honesty can be found at:
http://www.uga.edu/ovpi/honesty/acadhon.htm