

ECONOMICS 422
INVESTMENT, CAPITAL,
AND FINANCE
 INTRODUCTION

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 OH: TuWF 11-12

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Course Material on the Web

- Class Webpage:
faculty.washington.edu/ezivot/econ422/econ422.htm
- Class email list:
econ422a_su10@u.washington.edu
 (you will be automatically subscribed)
- I will use the website and class email list to post announcements, homework corrections, etc.

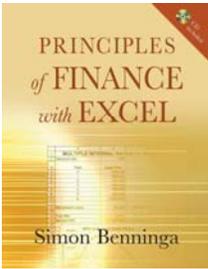
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COURSE MECHANICS
 (see syllabus on webpage)

- Prerequisites: math, stat, micro theory
- Text 1: *Pearson Custom Business Resources: Investment Capital Finance*. Selected chapters from Berk and DeMarzo, *Corporate Finance 2/e*.
- Optional Text 2: Benninga, *Introduction to Finance with Excel*.
- Additional Readings on class webpage.
- Exam Pack: Several sets of past exams have been posted on the class web site
- Calculator, Excel, Web
- Exams, homework, investment project
 - » HW due every Monday
 - » Midterm: Monday, May 3rd
 - » Final: Tuesday, June 8, 8:30-10:20 SAV 264

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UW Optional Text: Principle of Finance with Excel



- Excel is the standard tool used in the *real world* for financial modeling
- Text shows how to solve financial analysis problems using Excel
- <http://pfe.wharton.upenn.edu/>

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UW HOW TO DO WELL

I expect students to master certain key ideas and computational techniques and to develop the ability to think through and solve finance problems.

- Read text and other assigned readings
- Find and work with a study partner
- *Work problems!*
- Review the old exams

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UW Additional Courses in Finance

- Econ 421 – Money, Credit and the Economy (Fall)
- Econ 423 – Topics in Financial Economics (Spring)
- Econ 424 – Introduction to Computational Finance and Financial Econometrics (Fall)
- Econ 426 – Advanced Financial Economics (Winter)
 - » *New class* on derivatives etc.
- Econ 464 – Financial Crisis (Fall & Winter)
- **Math/Stat 492** – Stochastic Calculus
- **Math 408** – Nonlinear Optimization

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About Me

- Professor of Economics and Gary Waterman Distinguished Scholar
- Adjunct Professor of Finance in Business School
- Adjunct Professor of Statistics
- UC Berkeley undergrad
 - » Econ and Stat double major
- Yale Ph.D. with emphasis in Econometrics and Finance
- Co-Director of Graduate Certificate in Computational Finance
- Co-author of *Modeling Financial Time Series with S-PLUS*, Springer-Verlag
- Risk management consultant to BlackRock Alternative Advisors

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About Me: Teaching

- Graduate level: econometric theory, analysis of time series data, financial econometrics
- Undergraduate level: Econ 422, and course Econ 424 (computational finance)
- Course will closely follow Econ 422 as taught by Larina Davis.

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About Me: Research

- Econometric Theory
 - » Development of new statistical methodology for analyzing economic and financial data
- Time Series and Financial Econometrics
 - » Model trend and volatility behavior of economic and financial data
 - » Statistical analysis of ultra high frequency data (intra-day tick by tick)
- Finance
 - » Use of factor models for risk analysis and management
 - » Statistical analysis of hedge fund data
- Statistical Software Development
 - » S-PLUS and R for statistical analysis of financial data

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Finance Theory Key Ideas and Questions

- Inter-temporal Consumption/Saving Decisions
- Role of financial markets
 - » How do they work?
 - » Are they efficient?
- Determinants of interest rates and bond prices
 - » Effect of time to maturity?
 - » Effect of Risk?
- Determinants of Equity prices/returns
 - » Stock price valuation
 - » Tradeoff between risk and reward
- Valuation and use of derivative securities
 - » Options, forwards, futures, swaps
 - » Hedging financial risks

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Firm's Financial Decisions

- Investment decisions
 - » What projects should the firm undertake?
- How will projects be financed?
- Management structure and incentives
 - » CEO compensation
- Dividend Policy
- Financial structure of the firm
 - » Debt vs. equity
 - » Financial instruments

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Econ 422 Investment Project

- Objectives: learn financial institutions and conventions
- Essential features:
 - » Create a \$100,000 portfolio, describe it in Report 1
 - » Value the portfolio at term end, report performance in Report 2
 - » Intermediate trading is allowed but not required
- Some helpful hints:
 - » Start right away
 - » Read the detailed instructions carefully!
 - » Reread the instructions, list questions
 - » Research investment vehicles on the web – use finance.yahoo.com and the education resources
 - » Work with your study partner (but the portfolio and write up must be your own)

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Some Portfolio Assets for Investment Project

- Common Stock
- U.S. Treasury Bills
- Treasury, corporate, and agency bonds
 - » Zero coupon bonds (STRIPS)
 - » Coupon bonds (T-notes & T-bonds)
 - » Inflation protected bonds (e.g. TIPS)
 - » Investment grade and junk corporate bonds
- Mutual Funds
- Exchange Traded Funds (ETFs)
- Futures Contracts
- Options (calls and puts)

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13
