Financial Economics 220:413 is an “upper” level elective

This course will address the practical and theoretical principles of Financial Economics at an intermediate level; to discuss the economic models employed in financial markets and allow economic students a thorough view into the financial markets.

Prerequisite: 220: 320 Intermediate Microeconomics
220: 322 Econometrics

All prerequisites require a minimum grade of C

Text: Roy E. Bailey The Economics of Financial Markets

Data analysis tool: Microsoft Excel / R

Learning Goals:
Upon conclusion student will have researched and practiced:
   Financial markets, asset classes and structure
   Risk and Portfolio selection
   Asset pricing – CAPM, APT, Binomial (Options), Black Scholes (Options)
   Bonds, Futures, Swaps and Options
   Current data and analysis in the financial markets

Pedagogy:
This course will employ lectures, supplemental reading and additional online resources, quizzes and RP (see NOTES page 2)

Grading: (2) Midterm ( in-class each 25%) 50%
(2) 30 minute quizzes (via Sakai) 15%
No make-up quizzes
(5) RP (Groups of 4) 25%
Attendance/Participation 10%  http://sims.rutgers.edu/ssra

All of our course materials (slides and excels) are for our course use only, redistribution is prohibited and protected.
Academic Integrity

Cheating and Plagiarism will not be tolerated. I will give enough opportunity to earn high grades by yourself there is no need for me to find any cheating or plagiarism of any sort. Dr. Sopher will be notified immediately.

All quizzes and RP will be completed by their due dates, no late work to be accepted.

Attendance

Students are expected to attend all classes. If you expect to miss more than one or two classes because of illness or a family emergency, please use the University absence reporting website http://sims.rutgers.edu/ssra to indicate the date and reason for your absence. An email is automatically sent to me.

Class Conduct

It is the expectation of mutual respect throughout the course, not only between instructor and student but between you and your peers.

No recordings/photos/videos are to be taken of our class, you will have access to all materials needed via Sakai and such infringes on the privacy of everyone in the course

Sakai

The quizzes will be administered via our Sakai coursesite module. Any issues taking quizzes via Sakai module will impede your course be aware of this from the start of our course. Discuss with me your issues with this type of testing ASAP. Everything you will need will be available through our Sakai coursesite as well.

Communication:

Primary e-mail: ldemarco@econ.rutgers.edu
In case of emergency:l.demarco.ru@gmail.com

E-mails are expected to be professional and proper, only e-mails of this type will be answered.

Missed quizzes/exams:

A missed quiz will earn a zero points, no make-up for quizzes.
A missed exam will earn zero points. Departmental Make-Up Exams will only be given under extraordinary circumstances. Students should check with me before missing an exam to see whether their particular circumstances meet my very limited definition of extraordinary.

Notes:

- Quizzes and Midterms will be multiple choice, T/F and/or fill in questions that test concept and/or calculation
  - They are to be completed individually
- RP in this course are research and/or practice assignments
  - Groups of 4 or less
  - You will submit your work as well as an accompanying questionnaire via sakai
- Attendance/Participation will include in class and in addition online interaction:
  - (1) Asking at least 1 question each week on our course website
  - (2) Answering at least 1 question each week on our course website

All quizzes and RP will be completed by their due dates, no late work to be accepted.
All grades achieved during the semester are finalized by the last day of class.
Any RP grades for review must be in writing within 5 days of grade return.
<table>
<thead>
<tr>
<th>Week 1</th>
<th>1/15</th>
<th>Financial Economics, Asset classes, interest rates, Present Value, Expectation, Variance, Co-Variance</th>
<th>Ch 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>1/22</td>
<td>Return, Risk, Expected Value Criterion, Uncertainty, Expected Utility Hypothesis, risk aversion, risk premium</td>
<td>Ch 4</td>
</tr>
<tr>
<td>Week 3</td>
<td>1/29</td>
<td>Continued.. State-preference, EUH, Mean-Variance model</td>
<td>Release RP1 Quiz 1</td>
</tr>
<tr>
<td>Week 4</td>
<td>2/5</td>
<td>Portfolio selection: Mean-Variance Model, Modern Portfolio Theory and the Efficient Frontier</td>
<td>Ch 5</td>
</tr>
<tr>
<td>Week 5</td>
<td>2/12</td>
<td>CAPM: assumptions, derivation, systematic risk, idiosyncratic risk APT: assumptions, single-factor, multi-factor</td>
<td>Ch 6 Ch 8</td>
</tr>
<tr>
<td>Week 6</td>
<td>2/19</td>
<td>Risk: Volatility, VAR, GARCH(1,1) model</td>
<td>Release RP2</td>
</tr>
<tr>
<td>Week 7</td>
<td>2/26</td>
<td>Markets: Bonds, ZCB, Duration, Yield Curves Term structure of interest rates Debt instruments</td>
<td>Ch 12 Ch 13</td>
</tr>
<tr>
<td>Week 8</td>
<td>3/5</td>
<td>Markets: Futures, forwards, spot vs. futures, futures curves, backwardation/contango, pricing futures Midterm 1: 3/6</td>
<td>Ch 14 Mid 1</td>
</tr>
<tr>
<td>Week 9</td>
<td>3/12</td>
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<td>Spring break</td>
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<tr>
<td>Week 10</td>
<td>3/19</td>
<td>Speculation and hedging, basis, hedge ratio, optimal hedging and Linear regression, CAPM to futures</td>
<td>Ch 15 Release RP3</td>
</tr>
<tr>
<td>Week 11</td>
<td>3/26</td>
<td>Commodities, Foreign exchange, Financial futures, interest rate futures, stock index futures Swaps: fundamentals, plain vanilla IR swap</td>
<td>Ch 15 Ch 17</td>
</tr>
<tr>
<td>Week 12</td>
<td>4/2</td>
<td>Markets: Options fundamentals, put-call parity</td>
<td>Ch 18</td>
</tr>
<tr>
<td>Week 13</td>
<td>4/9</td>
<td>Pricing, valuation, Implied volatility, binomial, Black-Scholes, the Greeks Midterm 2: 4/10</td>
<td>Ch 19 Release RP4 Mid 2</td>
</tr>
<tr>
<td>Week 14</td>
<td>4/16</td>
<td>Options applications</td>
<td></td>
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<tr>
<td>Week 15</td>
<td>4/23</td>
<td>Behavioral Finance/Economics Efficient Markets Economic Data and Reports Fundamental vs. Technical vs. Quantitative Analysis</td>
<td>Ch. 3 Release RP5 Quiz 2</td>
</tr>
<tr>
<td>5/1</td>
<td>Speculation as a Fine Art Caveats of Asset pricing What makes sense to you, now that you know?</td>
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</table>

**Disclaimer:** We will cover content in this order. The dates of quizzes, midterms and RP are tentative, they can change due to our class meetings. I will discuss in advance before release and due dates. I reserve the right to make any changes to the syllabus.
Important Dates:
Last Day to Drop a Course Without a “W” January 24
Undergraduate Drop period with a “W” grade January 25 thru March 20
Spring 2017 Academic Calendar

GRADE BRACKETS

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$90 \leq x \leq 100$</td>
</tr>
<tr>
<td>B+</td>
<td>$85 \leq x &lt; 90$</td>
</tr>
<tr>
<td>B</td>
<td>$80 \leq x &lt; 85$</td>
</tr>
<tr>
<td>C+</td>
<td>$75 \leq x &lt; 80$</td>
</tr>
<tr>
<td>C</td>
<td>$70 \leq x &lt; 75$</td>
</tr>
<tr>
<td>D</td>
<td>$60 \leq x &lt; 70$</td>
</tr>
<tr>
<td>F</td>
<td>$x &lt; 60$</td>
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Disclaimer: I reserve the right to curve final grades due to the level of difficulty in the nature of the course. No additional points will be given to grades; the grade brackets will shift to support the curve.

Student-Wellness Services:

Just In Case Web App, for a mental health crisis for you or a friend:
http://codu.co/cee05e

Counseling, ADAP & Psychiatric Services (CAPS), for non-emergency psychological health issues:
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 www.rhscaps.rutgers.edu/

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 www.vpva.rutgers.edu/

Disability Services
(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Scarlet Listeners, for confidential peer counseling and referral hotline:
http://www.scarletlisteners.com/ or call (732) 247-5555