Course objectives and methodology

An examination of all major financial markets: equities, bonds, options, forwards and futures. Uses modern financial theory, including asset pricing models such as the CAPM. This course won't teach you how to get rich quickly, but it might teach you how to get rich slowly.

The course will be taught as an asynchronous online course: you read the textbook and watch the posted videos, then apply your knowledge through numerical and Excel problem sets, essays and discussions.

Since research shows that learning by doing has a six times better outcome than learning by watching or reading, you'll be working on a lot of problems. You will also discuss financial concepts in sections.

Course requirements and evaluation

- Participation
  - Piazza 5%
  - Sections 10%
  - Canvas discussions 10%
- Essays (due Wednesdays by 11:59pm, in groups of two students) 15%
- Problem sets 30%
  - Numerical problem sets (due Thursdays by 11:59pm)
  - Excel problem sets (due Fridays by 11:59pm)
- Final exam (Thursday, 8/25, 7-9pm in person, or any 2 hours b/w 8am and 8pm PDT online) 20%
- Excel capstone (Friday, 8/26, any 2 hours between 8am and 8pm PDT) 10%

Participation includes Piazza, sections and Canvas discussions:
- You must make at least 5 contributions to Piazza, i.e., post a question, note, answer, follow-up or comment about course content, not logistics, by the end of the quarter. You can only get 1 contribution point per week, i.e., don’t wait until the last week to contribute. When asking a question, show what you have already tried, or your draft answer for an essay question.
- Sections are online through Zoom on Mondays and Tuesdays. You need to register for and participate in one section per week (you’re allowed to miss one section). Students will be called on to read their draft answer to the essay questions and will receive feedback from the TA. Only registered students who read out their draft answer will get participation credit.
- You will take part in several Canvas discussions: you submit an original post and reply to two posts by other students for each discussion (your lowest score will be dropped).

The essays test your understanding of financial concepts. Your lowest score will be dropped. Essay topics will be revealed on Wednesday mornings, so that all essay questions are considered equally in sections. You’ll work on the essays with another student, assigned by me. Each group can submit only one essay: each submission will overwrite all earlier submissions. I recommend that you start a Google Doc and work together at the same time. A late penalty of 2% will apply for each day that your work is late.

Practice problems sets are optional. You can request to see the solution and tackle each problem again with different numbers. The practice problem sets are good preparation for the required problem sets.

Problem sets are online and accessed through Canvas. You have 10 attempts for numerical and Excel problems, and 4 attempts for multiple choice problems. If you’re stuck, you can request to see the solution to numerical and spreadsheet problems and tackle the problem again with different numbers, at a cost of two points. You have 3 trials for each problem set: once you’ve completed all problems, you can reset the problem set and start again from scratch (late penalties still apply if you reset the trial after the due date). You should reset the problem set if you got less than 90%. Only the most recent trial counts. A late
penalty of 2% will apply for each day that your work is late. Once you’ve finished a problem, you can practice it again without affecting your recorded score.

The Excel capstone assignment is accessed through Canvas. It is open book and unproctored. You’ll have two hours to complete it, measured from the time you start.

The final exam will contain essay questions from the study guide and numerical problems similar to the homework problems. You only have one attempt and cannot request to see the solution. You can either take it in person, or online through Canvas and monitored by ProctorU. ProctorU is a live online proctoring service that allows you to take your exam from home. The service is available 24/7, however, you will need to schedule your proctoring session at least 72 hours in advance to avoid any on-demand scheduling fees. To create a ProctorU account and make a reservation, visit go.proctoru.com. In order to use the service, you will need to have a high-speed internet connection, a webcam (internal or external), a Windows or Apple operating system, and a government-issued photo ID. ProctorU recommends that you visit proctoru.com/testitout prior to your proctoring session to test your equipment. You should expect the startup process with the proctor to take about 10-15 minutes on the day of the final exam. However, this time will not affect your exam time. More info here and here.

Grades: D: 60%, C: 73%, B-: 80%, A-: 90%. There will be no curve and no extra credit, with one exception: if at least 80% of students submit a SETS evaluation at the end of the quarter, everybody will get a 2% bonus. You need to communicate any concerns about passing the course as early as possible, not at the end when nothing can be done anymore. In finance terms: I don’t write free options!

If you want a recommendation letter, you need to get an A- in two of my courses, actively contribute to Piazza and come to office hours.

How to succeed
- Buy the textbook (paper or electronic)
- Read the assigned readings and watch the videos
- Start all assignments early
- Reset the problem set trial if you get less than 90% and redo it from scratch to get up to 100%
- Ask for help and clarification: In section, office hours or on Piazza

Try to get at least 90% of points on the numerical and Excel problem sets, as you’re likely to do less well on the essays and the exam.

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me by email, preferably within the first two weeks of the quarter. I would also like us to discuss ways we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.

CFA scholarship
Of those students interested in taking a CFA exam, the student with the best overall performance will receive a scholarship (worth $750). If you want to be considered, please add your name here by July 31.

Required readings and resources
- Essentials of Investments (8th ed. or up), by Bodie, Kane & Marcus (BKM), McGraw-Hill ($5-250)
- Accepi (through Canvas; co-founded by me because competitors charge students $100) ($9.95)
- ProctorU: proctoring service for the final exam (needs appointment!) (free)
- Canvas: the platform for the delivery of this course (free)
- Zoom (for online office hours and sections) (free)
**Academic integrity**

You should work with other students on the problem sets and essays. However, every group has to submit their own essay. Copying another group’s work or submitting answers from the internet will result in a failing grade and sanctions according to UCSC’s [Academic Misconduct Policy](#).

**Schedule**

<table>
<thead>
<tr>
<th>Week start</th>
<th>Topic</th>
<th>Assigned readings</th>
<th>Due dates</th>
<th>PS (Th)</th>
<th>Excel (F)</th>
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</thead>
<tbody>
<tr>
<td>7/23</td>
<td>Fin. assets, markets, institutions</td>
<td>BKM 1.1-1.6, 2-4: Asset classes, markets, trading, mutual funds</td>
<td>7/27d</td>
<td>7/28</td>
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<tr>
<td></td>
<td>Excel</td>
<td>Excel Primer, You suck at Excel</td>
<td>-</td>
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<td></td>
<td>Time value of money</td>
<td>Ivo Welch: 2.4-2.5, 3.1-3.3</td>
<td>7/27e</td>
<td>7/28</td>
<td>7/29</td>
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<td>7/30</td>
<td>Risk and return</td>
<td>BKM 5.1-5.4: Risk and return</td>
<td>8/3d</td>
<td>8/4</td>
<td>8/5</td>
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<td></td>
<td>Portfolio management</td>
<td>BKM 5.5: Asset allocation; BKM 6.1-6.4: Diversification</td>
<td>8/3e</td>
<td>8/4</td>
<td>8/5</td>
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<td>8/6</td>
<td>Index models, CAPM</td>
<td>BKM 6.5 (first 4 pages): index model, 7.1-7.3: CAPM</td>
<td>8/10d</td>
<td>8/11</td>
<td>8/12</td>
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<td>Bonds</td>
<td>BKM 10.1-10.5: Bond prices, yields</td>
<td>8/10e</td>
<td>8/11</td>
<td>8/12</td>
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<td>8/13</td>
<td>Stocks</td>
<td>BKM 13.1-13.4: Equity valuation</td>
<td>8/17d</td>
<td>8/18</td>
<td>8/19</td>
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<td>Options and futures</td>
<td>BKM 15.1-2: Option markets; BKM: 17.1-4: Futures</td>
<td>8/17e</td>
<td>8/18</td>
<td>8/19</td>
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<td>8/20</td>
<td>Efficient markets</td>
<td>BKM 8: Efficient markets</td>
<td>8/24d</td>
<td>8/25</td>
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<td>Personal finance</td>
<td>Arithmetic of active management, How millennials can get rich slowly</td>
<td>8/24e</td>
<td>8/25 (final)</td>
<td>8/26 (capst.)</td>
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D/E: Discussion (d) or essay (e) (both on Canvas)  
PS: Numerical problem set (on Accepi through Canvas)  
Excel: Excel problem set (on Accepi through Canvas)