BUSI 721: Data Driven Finance
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RICE | BUSINESS
Jones Graduate School of Business

Instructor

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Course Description

This course is an introduction to investments, including the analysis of corporate investment projects, and to derivative securities. It will run on two tracks. The pre-recorded videos and weekly assignments are about investment analysis. The weekly live sessions will be about derivative securities. Grading will be equally weighted between investments assignement and a final exam on derivative securities.

Investments

We begin with foundational issues such as retirement planning and mortgage calculations. The next part of the course describes markets, assets, and properties of returns. We then study how to construct efficient portfolios of assets. The final part of the course pertains to the financial analysis of corporate projects.

Assignments and videos are linked on the course Canvas site. Copies of the slides are at busi721-901.kerryback.com/slides.html. Jupyter notebooks containing the code in the slides are at github.com/kerryback/2023-721-901-binder. As the course progresses, solutions to the assignments will be posted at github.com/kerryback/busi721-901/tree/main/solutions. A good reference for the course material is this free textbook by Ivo Welch of UCLA: corpfin.ivo-welch.info/read/.

Derivative Securities

We will follow the free online textbook written by your instructor in conjunction with Hong Liu of Washington University in St. Louis and Mark Loewenstein of the University of Maryland: book.derivative-securities.org. The book provides a link to a NotebookLM notebook that you can query regarding the book (NotebookLM is a RAG app provided free of charge by Google and powered by Google Gemini). It also provides a link to Jupyter notebooks containing all the code in the book. The lecture slides that we will cover in our weekly live sessions are (will be) posted at slides.derivative-securities.org.

More information about the final exam will be provided later.