

AI-Assisted Financial Analysis

Spring 2026



Instructor

Kerry Back

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Meeting Schedule

TTh 12:30 – 2:00

3/17/2026 – 4/23/2026

Special sessions:

- Saturday, March 21, 9:00-12:00 - optional Python session
- Tuesday, April 28 (exam week), 1:00-2:30 - group presentations

All sessions will be in McNair 212, including the special sessions.

Learning Objectives

1. How to use AI with code-execution tools to perform financial analysis and generate spreadsheets, reports, and presentations
2. How to use AI with code-execution tools to search, organize, and filter data and text
3. How to collaborate with AI in planning and evaluating work
4. How custom chatbots and AI agents work and are used in finance
5. How to use AI with code-execution tools as general agents

Course Topics

1. Claude.ai/Desktop
2. Mean-Variance Optimization
3. Google Gemini in Colab
4. Model Context Protocol
5. Claude Cowork
6. Claude Desktop in Code Mode
7. Claude Add-In for Excel
8. Claude Skills
9. Claude Code in VS Code
10. Discounted Cash Flow Analysis
11. Retrieval Augmented Generation
12. Fine-Tuning and Small Language Models
13. Building an AI Agent
14. Trading on News with AI

Grading

Grades will be based on six group projects (10% each), a group presentation (20%), and peer assessments (20%). The presentations will be on April 28 during exam week.

The projects are as follows. Details will be posted on Canvas. An assignment is due each Tuesday at 11:59 pm beginning March 24 and ending April 28.

1. Organizing and filtering text and data
2. Mean-variance analysis
3. Simulation
4. DCF analysis
5. Claude skill for DCF analysis
6. Agent for DCF analysis

Claude Accounts

Each student will be reimbursed for a Claude Pro account (\$20 per month).

Honor Code

The Rice University honor code applies to all work in this course.

Disability Accommodations

Any student with a documented disability requiring accommodations in this course is encouraged to contact me outside of class. All discussions will remain confidential. Any adjustments or accommodations regarding assignments or the final exam must be made in advance. Students with disabilities should also contact Disability Support Services in the Allen Center.