
Department of Finance
McCombs School of Business, University of Texas at Austin

Finance 297-2 # 03750

PORTFOLIO MANAGEMENT

Spring 2019

Monday & Wednesday at 1:00–3:00pm in GSB 3.104

People

Instructor

Jan Schneider

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CBA 6.272

Office hours: by appointment

TA

Content

This course introduces students to a modern quantitative approach to portfolio management. In quantitative finance we make decisions in a scientific way based on data. One of the key ideas of this approach is that there are multiple factors that determine asset returns and that we can use these factors to generate expected returns, manage portfolio risk and evaluate portfolio performance. We will develop a solid foundation of these concepts and then focus on the implementation of the concepts in practice. This course will mostly be a hands-on experience where we apply real-world data to realistic investment strategies. At the end of the class you will know how to research quantitative trading ideas and analyze returns of your own portfolio.

Class Material

I will post notebooks at:

www.janschneider.website/teaching/portfoliomanagement.html

Assignments

We will have six sets of (individual) weekly multiple-choice assignments posted on Canvas that are due each Sunday at 6pm.

Grading

Class participation counts 10% towards your grade.

The six equal-weighted assignments count a total of 30%.

We will have one final exam that counts 60%.

Schedule

1	Wed	Jan 23	Introduction
2	Mon	Jan 28	Life-cycle investing I
3	Wed	Jan 30	Life-cycle investing II
4	Mon	Feb 4	Stock returns I: mean, volatility, autocorrelation, Sharpe ratios
5	Wed	Feb 6	Stock returns II: volatility timing
6	Mon	Feb 11	Rebalancing I: equal weights of stock and bonds
7	Wed	Feb 13	Rebalancing II: turnover and transaction costs
8	Mon	Feb 18	Mean-variance optimization I: theory (linear algebra)
9	Wed	Feb 20	Mean-variance optimization II: implementation
10	Mon	Feb 25	Constructing factors I: selecting assets and calculating returns
11	Wed	Feb 27	Constructing factors II: complete algorithm
12	Mon	Mar 4	Factor z-scores
13	Wed	Mar 6	Portfolio risk: factor covariance matrix
13	Mon	Mar 11	Review

Students with Disabilities

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259.

Academic Honesty

The University of Texas does not tolerate academic dishonesty. Your responsibilities with regard to scholastic dishonesty are described in detail in the Policy Statement on Scholastic Dishonesty for the McCombs School of Business. In particular, it is expected that the work on your examinations will be entirely your own. Failure in these regards may result in failure on the examination or course.