

# Teaching Statement

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I adapt both the content of a course and the manner of its delivery to the students in the classroom. Undergraduate and master's students will apply finance in practice, so I teach it through the markets, data, and cases they will meet in their work. Doctoral students are preparing to become professors, so I teach corporate finance theory as research training: the mathematics, the economic reasoning behind each model, and the craft of building models of their own. I have taught in both modes for years.

## 1 Investment Management

I have taught the undergraduate investments course at Purdue for eight years, most recently in three sections. Its core is traditional, portfolio choice, efficient markets, diversification, the CAPM and its anomalies, multi-factor models, and the evaluation of managed money, drawn from several textbooks, including recently published ones, and from classic journal articles. The current design applies that core to equity and cryptocurrency markets side by side: cross-exchange arbitrage and the contrast between order-book and automated-market-maker venues show why the trading mechanism matters, and the search for alpha in price and volume data tests market efficiency, where candidate signals are screened with information coefficients and reduced by correlation clustering and principal components. A Python companion runs through the semester, in which students pull data through open interfaces such as Yahoo Finance and exchange APIs, build and backtest long-short strategies, and learn why backtested returns overstate live returns, the daily work of a junior quantitative researcher. I regularly invite practitioners to the class.

## 2 Fixed Income Securities

I have taught fixed income securities to Master of Finance and MBA students, covering Treasury and money markets, the term structure, duration, swaps, and credit. Five Harvard Business School cases anchored the course. Students prepared each case in groups and wrote a memorandum as a manager or consultant making a recommendation; because a case has no single correct answer, the discussion trained them to separate sound from unsound analysis of a bond or credit decision.

## 3 Corporate Finance Theory

My doctoral seminar covers corporate finance theory, for which no satisfactory textbook exists; my self-contained lecture notes begin with the necessary stochastic calculus and dynamic programming and proceed to Leland-type models of debt, dynamic capital structure, and optimal contracting in static, discrete-time, and continuous-time settings. The take-home problems ask students to set up a tractable model of an empirical question, because a theorist's first skill is choosing what to leave out.

## 4 Breadth and Preparation

I have also taught undergraduate corporate finance and assisted in MBA and master's courses in derivatives, financial engineering, and mergers and acquisitions. I am prepared to teach investments, corporate finance, and fixed income at any level, electives in quantitative investing and digital asset markets, and an elective on artificial intelligence in finance.