

# PHD: THEMATIC SEMINARS (PST)

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## **PST 1702 Management Strategy (3 credits)**

This course focuses on the foundations of strategic management research, focusing primarily on strategy content research (i.e., what strategies are used by firms, and what is their effect of firm performance). Its principal objective is to serve as an introduction to research in Strategic Management. To do so, we will cover a number of the principal theoretical streams in Strategic Management, including business-level strategy, competitive strategy and theories of the firm. Upon completion participants will have developed an understanding of the key concepts, theories and interconnected research streams in Strategic Management; be able to critically evaluate and review academic writings in the field of Strategic Management; develop new ideas and approaches that advance some portion of the theory/research on Strategic Management; and communicate in oral and written form knowledge, critical evaluations and make individual contributions to the Strategic Management literature.

*Typically Offered:* Every two or more years

## **PST 1705 Organizational Behavior (3 credits)**

This seminar is designed to inform participants of contemporary theory and research in organizational behavior, with a focus on individual employee behavior. The course will provide a thorough exposure to the range of topics and research issues that will enable participants to conduct advanced research in the field.

*Typically Offered:* Every two or more years

## **PST 1706 Mathematical Statistics (3 credits)**

The objective of this reading course is to ensure a solid foundation in the principles of probability and mathematical statistics, on a par with that received by PhD graduates from applied statistics departments. Attention will be given to the fact that our graduates are likely to be teaching this material if they should pursue an academic career. The course will involve studying chapters from the book by Casella and Berger mentioned below and presenting them to the class about once a week, thereby gaining focused teaching experience, as well as working on a few selected homework problems from each chapter. The output for the course will consist of a portfolio of prepared presentations and homework problems.

*Typically Offered:* Every two or more years

## **PST 1707 Advanced Analytics (3 credits)**

This is a course in classical stochastic models, Bayesian analysis and other advanced stochastic models that are used in various areas of business. The initial component of the course will cover traditional stochastic models such as count processes, waiting time processes, Markov processes (discrete and continuous), branching processes, birth death processes and queueing processes. The second component of the course will cover both analytic and computer driven Bayesian models and utilize OpenBugs for applications. The final component of the course will cover topics that are of interest to the students. These topics could include hierarchical models, mixed models (latent class models), generalized linear models (glm), generalized estimating equation models (gee), longitudinal models, or time series models. This course provides a deeper exposure to the background, derivation and theory associated with these topics along with an understanding of how to apply the models to research.

*Typically Offered:* Every two or more years

## **PST 1710 Behavioral and Experimental Economics (3 credits)**

This course introduces the issues covered and methodologies employed in the field of Behavioral Economics. Behavioral Economics adds insights from Psychology to the economic model of behavior. It looks beyond the standard neoclassical model of how people, managers, and firms make decisions, examining ways in which behavior is not consistent with strict rational self-interested decision-making. We will review how standard economic theory predicts people will behave in a given situation and compare that to how people actually behave. The course begins with an overview of the primary statistical tools employed in the field. Because it is frequently inappropriate to assume that our data are drawn from a particular type of distribution, many if not most of these techniques are nonparametric. With these methods in our toolbox, we then proceed to an overview of the many issues covered in the field and discuss examples from the literature of how these tools are applied.

*Typically Offered:* Once a year

## **PST 1711 Econometrics (3 credits)**

This course will introduce the student to a wide range of micro-econometric models commonly used in data analyses and empirical research within academia, business, and policy analysis, with a focus on three broad aims. First, we will learn and discuss the interpretation of the parameters and the various advantages, limitations, and assumptions underlying each estimator. Second, we will develop and study each estimation method with an emphasis on application, seeing how each method is used in practice, and on implementation, learning how to apply each estimation method within a statistical software package. Third, the focus is on deriving causal effects based on observational data.

*Typically Offered:* Every two or more years