ISOM 5540
Introduction to Probability
Course Description and Schedule Fall 2020

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Course Description

This is a course on Probability that serves as an introduction to the subject at a level which is sufficient for most of your follow-up courses within the Business School. In particular probability is the basic language of Statistics. This is a calculus-based course and covers the following material.

Axioms of Probability, Conditional Probability and Independence, Continuous and Discrete Random Variables, Transformation of Random variables, Joint Distributions, Properties of expectations including moment generating function, Central limit theorem and Law of Large numbers, and other miscellaneous topics of interest.

Schedule

Lectures will be conducted via Zoom every Thursday from 3:00-5:50PM unless stated otherwise.

Grading

This course is graded as Pass/Fail.

Assessment

Students will be given regular homework assignments and I will choose students to present problems and solutions every week.

Midterm and Final exams will be take-home. Homework assignments will be given on a biweekly basis (every two weeks).

Reference books

1. *A first course in Probability, Sheldon Ross*. (Required). Recent editions preferred.

   The textbook can be purchased either as a hard copy or as an e-book. If students wish to purchase the textbook from the University book store, they can do so here. The information from the bookstore regarding the textbook is as follows

COURSE CODE	ISBN	TITLE	AUTHOR	EDITION	PUBLISHER	DISCOUNTED PRICE	ORDER TIME
ISOM5540	9781292269207	First Course in Probability (Global Edition) (Physical Textbook)	Sheldon Ross	10	Pearson	$351.9	
ISOM5540	9781292269238	A First Course in Probability (Ebook)	Sheldon Ross	10	Pearson	$332.0	2-3 working days

2. *Probability, Jim Pitman.* (optional)

   This book is available as an e-book from the HKUST library. Simply search for the book name in the library's website (library.ust.hk) and follow the results to obtain the book. The book is published by Springer and is available to all university students via SpringerLink.

   For ease of use, students can visit this link. This requires a login using ITSC username/password.