

# Sta347H1 F L0101/ L2001 2024 Course Information

This course is an introduction to probability from a non-measure theoretic point of view. Random variables/vectors; independence, conditional expectation/probability and consequences. Various types of convergence leading to proofs of the major theorems in basic probability. Simple stochastic processes such as Poisson process will be introduced if time permits.

Instructor Zhou Zhou, Office: Room 9072, 700 University Ave. (Ontario Hydro Building).

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Email: zhou.zhou @ utoronto.ca (The best way to reach me).

Office Hours: Wednesdays 2:00 pm to 3:30 pm via Zoom (Longer office hours will be provided before the midterm and final exams).

TAs Jiayue Huang. Email: jiayue.huang@mail.utoronto.ca.

Office hour: TBA.

Madhu G. Email: madhu.gunasingam@mail.utoronto.ca

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Xiaofan X. Email: lkwithsun@mail.ustc.edu.cn.

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Lectures Tuesdays 11 am to 1 pm at WB116; Thursdays from 11 am to 12 pm at PB B250 from September 3rd to November 28th, except October 29th and 31th (Fall break).

Textbook Peter Whittle (2000). **Probability via Expectation, fourth edition.** Springer-Verlag, New York.

Readings R. L. Scheaffer and L. J. Young, **Introduction to Probability and Its Applications, third edition.** Brooks/Cole Cengage Learning, 2010.

Joseph K. Blitzstein and Jessica Hwang, **Introduction to Probability.** CRC Press, 2015.

Evaluation Final exam: **55%** (Scheduled by the Faculty) Cumulative.

Mid-term test: **35%** (Oct. 8th 11 am -1 pm, in class).

There will be no make-up midterms. If you have to miss the midterm, weights will be shifted to the final exam with valid evidences for absence.

HWs: **10%** Four times. The lowest HW score will be dropped.

Syllabus Week 1: Chapter 1.

Week 2: Chapters 1 and 2.

Week 3: Chapters 2 and 3.

Week 4: Chapter 3

Week 5: Chapter 4

Week 6: Midterm. Includes first four chapters.

Week 7: Chapter 5.

Week 8: Chapter 5 and 8.

Week 9: Chapter 8.

Weeks 10 and 11: Chapter 7.

Week 12: Chapter 6.