

MH1820 Introduction to Probability
and Statistical Methods
Course Information AY2023-24 Sem 2



- **Instructor:** Dr. Ku Cheng Yeaw
- **Office:** SPMS-MAS-05-11
(School of Physical and Mathematical Sciences)
- **Consultation:**
Email: cyku@ntu.edu.sg

Lectures:

- WED 09.30-11.20 at LT22

All lectures will be recorded.

Tutorial:

You will attend a weekly in-person one-hour tutorial session, starting from Week 2.

University Home-Based Learning Week

Week 5: 12 Feb – 16 Feb 2024

- Lecture & Tutorial: Pre-recorded Videos
- Consultation via Zoom: to be arranged and informed by your respective tutors

Assessment:

- 10% Homework 1 (Released on 05 Feb 2024 (Week 4). Due on 25 Feb 2024, 11.59PM)
- 10% Homework 2 (Released on 25 Mar 2024 (Week 10). Due on 14 Apr 2024, 11.59PM)
- 20% Midterm Test* (Week 8 Wednesday **13-Mar-2024, 09.45-10.45, Venue: Hall C**). No lesson after the test.
- 60% Final Exam*

*For both the Test and Final Exam, each candidate is allowed to bring in one (1) double-sided A4-size reference sheet with texts **handwritten** or **typed** on the paper (no sticky notes/post-it notes or any printed material on the reference sheet).

Recommended Reference

- Hogg, R.V., E.A. Tanis and D.L. Zimmerman Probability and Statistical Inference (2015, 9th Ed.), Pearson ISBN: 9780321923271
- I. and M. Miller, John E. Freund's Mathematical Statistics with Applications (2014, 8th Ed.), Pearson Prentice-Hall ISBN: 978129202500
- Walpole, Myers, Myers, Ye, Probability and Statistics for Engineers and Scientists, 9th Edition, Pearson. ISBN:9780321629111 (E-Text available on NTULearn via [MyMathLab](#) link on left panel.)

Course Content

Topic	Week
Probability	1, 2
Discrete Distributions	3, 4
Continuous Distributions	5, 6
Bivariate Distributions	7, 8
Functions of Random Variables and Estimation, Conditional expectation and variance involving multiple random variables	9, 10
Law of Large Numbers and the Central Limit Theorem, Hypotheses Testing	11, 12

Absence due to valid/medical reasons for assessments.

- (1) Send an email to the course instructor regarding the absence.
- (2) Submit the original Medical Certificate to your home school academic office. The Medical Certificate should be issued in Singapore by a medical practitioner registered with the Singapore Medical Association.

Make-up assessments will be arranged.