

E&CE 316
Probability Theory and Random Processes
Winter 2017

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This course introduces the fundamental concepts of probability theory and random processes. It presents the mathematical tools used to analyze and interpret random events occurring in natural phenomena, games, sciences and engineering.

Office Hours:

Tuesdays 12:30 – 1:00 pm (Shayan Mohajer Hamidi, smohajer@uwaterloo.ca, DC2733, ext 35273)

Wednesdays 11:30 – 1:00 pm (Amir K. Khandani, Khandani@uwaterloo.ca, DC2702, ext 35324)

Thursdays 12:30 – 1:00 pm (Shayan Mohajer Hamidi, smohajer@uwaterloo.ca, DC2733, ext 35273)

Fridays 4:30 – 6:00 pm (Ali Saheb Pasand, asahebpa@uwaterloo.ca, DC2727, ext 33142)

Course Texts:

Sheldon Ross, *A First Course in Probability (any edition)*, Prentice-Hall.

Copy of selected sections from R.D. Yates, *Probability and Stochastic Processes, John Wiley* (students can entirely rely on course notes for this part).

Course Grading:

Mark = $\max[(0.3 \times \text{midterm mark} + 0.7 \times \text{final mark}), \text{final mark}]$

Course web-site:

<http://cst.uwaterloo.ca/316>

Course Schedule (refer to notes for section numbers)

weeks	Chapters from Notes
1	Chapter 1
2	Chapter 2 and Chapter 3
3	Chapter 4, sections 4.1 to 4.6
4	Chapter 4, sections 4.7 to 4.9
5	Chapter 5, sections 5.1 to 5.4
6	Chapter 5, sections 5.5 to 5.7
7	Chapter 6, sections 6.1 to 6.3
8	Chapter 6, sections 6.4 to 6.6
9	Chapter 7
10	Chapter 8 and Chapter 9, sections 9.1 to 9.5
11	Chapter 9 (rest of the chapter)
12	Chapter 10 and Chapter 11