

**UIC Department of Mechanical and Industrial Engineering**  
**IE 342 - Probability and Statistics for Engineers**  
**Spring 2012**

**Instructor**

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Office hours (lecture questions): Monday and Wednesday 12pm–1pm or by appointment

**Teaching Assistant**

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Office hours: Wednesday 9:30–10:30am and Thursday 2–4pm in room 3287 SEL

**Meeting times**

The class meets on Mondays, Wednesdays and Fridays at 11-11:50am in DH 220. Please arrive on time and turn your cell phones off during the lecture. Any student using a phone for texting, emailing, etc. will be asked to leave the classroom.

**Catalog Description**

3 hours. Probability, random variables, mathematical expectation, discrete and continuous distributions, estimation theory, test of hypothesis, and introduction to standard experimental designs. Prerequisite: MATH 181.

**Textbook**

Walpole, Myers, Myers and Ye, *Probability and Statistics for Engineers and Scientists*, 9<sup>th</sup> Edition, Prentice Hall, 2011. Topics to be covered: Chapter 1-10 (partial coverage).

**Web page**

Course-related information announcements, and homework assignment and solutions can be found on Blackboard.

## Homework

Homeworks are assigned on Blackboard at least a week in advance of the due date, and are due by 11am on the due date. You must submit your assignment in person as a hard copy at the lecture. A homework turned in by someone else or a late homework will not be accepted. Students with documented medical reasons may be excused. The homework solutions will be posted on Blackboard on the due date or shortly after. Graded homeworks will be returned in class the following week.

## Grading

Homeworks, midterms, and final exam are graded numerically. The course grade will be determined as follows:

Homework and class participation	10 %
Midterm I	25 %
Midterm II	25 %
Final Exam	40 %

The homework and class participation grade is evaluated based on class attendance, class participation, and the average of all homework grades except the lowest one.

## Tentative course outline

Week 1	Jan. 9–13	Chapter 1, 2 (1)	HW 1 assigned on 1/13
Week 2	Jan. 18–20	Chapter 2 (2)	HW 1 due; HW 2 assigned on 1/20
Week 3	Jan. 23–27	Chapter 2 (3)	HW 2 due; HW 3 assigned on 1/27
Week 4	Jan. 30–Feb. 3	Chapter 2 (4), 3(1)	HW 3 due; HW 4 assigned on 2/3
Week 5	Feb. 6–10	Chapter 3 (2), 4 (1)	HW 4 due on 2/10
Week 6	Feb. 13–17	Chapter 3 (3), 4(2), 5(1)	Midterm I on 2/17; HW 5 assigned on 2/17
Week 7	Feb. 20–24	Chapter 5 (2)	HW 5 due; HW 6 assigned on 2/24
Week 8	Feb. 27–Mar. 2	Chapter 6 (1)	HW 6 due; HW 7 assigned on 3/2
Week 9	Mar. 5–9	Chapter 6 (2)	HW 7 due; HW 8 assigned on 3/9
Week 10	Mar. 12–16	Chapter 8 (1)	HW 8 due on 3/16
Week 11	Mar. 26–30	Chapter 8 (2)	Midterm II on 3/26; HW 9 assigned on 3/30
Week 12	Apr. 2–6	Chapter 9 (1)	HW 9 due; HW 10 assigned on 4/6
Week 13	Apr. 9–13	Chapter 9 (2)	HW 10 due on 4/13
Week 14	Apr. 16–20	Chapter 10 (1)	HW 11 assigned on 4/18
Week 15	Apr. 23–27	Chapter 10 (2)	HW 11 due on 4/25
	TBA		Final exam