Math 4030FA/FB Probability and Statistics (2015 Fall)

Instructor: Dr. Wendy Huang

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Course Website: http://whuang.lakeheadu.ca/4030/4030.htm

Lectures for 4030FA:	**Lectures for 4030FB:**
MW: 8:30 – 10:00 AM (AT 1001)	MW: 11:30 – 1:00 PM (AT 1003)

Office Hours: Mon. & Wed.: 2:00 – 3:00 PM (RB 2007)

Email Communication: Any time. When sending emails regarding the course, include course number, your name, and keywords in the subject line. For example, "Subject: Math 4030, John Smith, formula for standard deviation". (Otherwise, your message will not be opened.)

Textbook: Richard Johnson, Miller & Freund's Probability and Statistics for Engineers, 8th Edition.

Performance Evaluation:

	Weight
Assignments	20%
Midterm	20%
Final Exam	60%

Lectures:
1. Students are expected to attend all lectures, prepared. Preparation includes review of the previous lectures and preview of the upcoming course materials according to the course schedule.
2. Students are fully responsible for any missed information including announcements due to the absence of lectures.
3. Private discussions and/or conversations are not permitted during lecture time. Cell phones are to be turned off during lecture time.

Assignments:
- There will be 10 assignments, of which 8 highest marks will be used toward the final grade of the course. The problem sets will be posted on the course website.
- The assignments can be done by hand writing, computer typing, or mixed the both. Statistical analysis can be done by using handheld calculator, Excel, R, SPSS, or any other statistical analysis package. A cover part (either a separate page or top part of the first page) is needed for every assignment, which includes your full name (same as the one on your student ID card), student ID number, the course number, and assignment number.
- To submit your assignments, drop them in the labeled assignment box at the 2nd floor hallway of Ryan Building before 4:00 PM on the due date (normally Wednesdays). (Assignments will **NOT** be collected at the lectures.)
- Solutions of the assignments will be available online following the due dates. For this reason, no late assignments will be marked, and no request for assignment extension will be granted, under **ANY** circumstance.

- Students are expected to do their assignments **independently**. Plagiarism will be disciplined according to university regulations.

Midterm and Final Exams:
- The 80-min midterm exam is scheduled during the lecture hours on Oct. 26. The 3-hour final exam is scheduled at the end of the term.
- Both exams are close-book. Students are allowed to bring 1 page (letter size, both sides) of personal formula sheet (for formulas only) and a non-programmable calculator. Related tables, when needed, will be provided.

Tentative Schedule (Subject to Change):

Week	Content	Assignments (Due Dates)
Week 1 (Sept. 14 & 16)	Introduction, Tables, and Charts (Ch. 1-2)	Assignment 1 (Due: Sept. 23, 4:00PM)
	Descriptive Measures (Ch. 2)	
Week 2 (Sept. 21 & 23)	Sample Space, Events, and Definition of Probability (Ch. 3)	Assignment 2 (Due: Sept. 30, 4:00PM)
Week 3 (Sept. 28 & 30)	Random Variables and Binomial Distributions (Ch. 4)	Assignment 3 (Due: Oct. 7, 4:00PM)
	Discrete Probability Distributions (Ch. 4)	
Week 4 (Oct. 5 & 7)	Continuous Probability Densities (Ch. 5)	Assignment 4 (Due: Oct. 14, 4:00PM)
	More Continuous Distributions (Ch. 5)	
Week 5 (Oct. 12 & 14)	Thanksgiving Holiday	
	Joint Distributions – discrete (Ch. 5)	Assignment 5 (Due: Oct. 28, 4:00PM)
Week 6 (Oct. 19 & 21)	Joint Distributions – continuous (Ch. 5)	
	Normality Check (Ch. 5)	
Week 7 (Oct. 26 & 28)	**Midterm (Oct. 26)**	
	Sampling Distribution of Mean (Ch. 6)	Assignment 6 (Due: Nov. 11, 4:00PM)
Week 8 (Nov. 2 & 4)	Estimation of Population Mean (Ch. 7)	
	Hypothesis Testing (Ch. 7)	Assignment 7 (Due: Nov. 18, 4:00PM)
Week 9 (Nov. 9 & 11)	Comparing Two Means (Ch. 8)	
	Inferences Concerning Variances (Ch. 9)	Assignment 8 (Due: Nov. 25, 4:00PM)
Week 10 (Nov. 16 & 18)	Inferences Concerning Proportions (Ch. 10)	
	Goodness of Fit Test (Ch. 10)	Assignment 9 (Due: Dec. 2, 4:00PM)
Week 11 (Nov. 23 & 25)	The Method of Least Squares (Ch. 11)	
	Regression Analysis (Ch. 11)	
Week 12 (Nov. 30 & Dec.2)	Correlation (Ch. 11)	Assignment 10 (Due: Dec. 9, 4:00PM)
	Analysis of Variance (Ch. 12)	
Dec. 7	TBD	