

Information Sheet for Introduction to Statistics
STAT C1000-45/ CRN 28635

Fall 2026

Instructor: Teck Ky

Day and Time: Lecture T & Th 6:30 PM-8:45 PM. Room: MLC 111

Office Hours: Tuesday and Thursday from 3:10 PM to 3:50 PM Room: E31

Text: Understanding Uncertainty (Fourth Edition) is authored by **Frank P. Soler** and published by Associated Research Consultants. The Fourth Edition has ISBN **978-0974138756**.

Labs: Will be given in the Mathlab

Calculator: I recommend that you buy CASIO fx-300ES PLUS for this course.

Topic: This course will cover selected topics from chapters 1-12, including graphical and numerical descriptive methods, probability, random variables and their distributions, sampling distributions, the central limit theorem, confidence intervals, hypothesis testing, z and t procedures, simple linear regression, one-way analysis of variance, and applications of the Chi-squared statistic.

Relationship of the course to College Mission: One aspect of the College's mission is to enable our students to realize their highest potential and to achieve their educational goals. Statistical literacy is as necessary as reading and writing literacy for competence in today's world. This class will help you foster a critical attitude towards statistical arguments and will help provide intuition about statistics which can sometimes be lost behind the mathematical formulas. We will use the latest technology to explore and simulate data.

I am here to teach you and to help you to learn how to learn the contents in this course, and you need to come to class to learn these contents.

Writing Across Curriculum Part: Students will use complete sentences to explain procedures and summarize the problems from the textbook, quizzes, and computer labs.

Laboratory projects: Two computer lab assignments will be given this quarter. You will learn how to use the programs from the Statdisk and EXCEL programs with your assignments. Extensive EXCEL programs and Statdisk demonstrations will be done in lectures and in the lab. These programs are available in S42 or S44.

Accommodation: If you have a learning or physical need that will require special accommodation, please make an appointment with our Disabled Students Program and inform me of your needs.

Reading Regularly = Understanding Class Material.

Homework: Mathematics is learned by doing problems. You cannot learn mathematics simply by watching during class or by having someone else solve problems for you. It is much like learning to play an instrument or a sport—becoming proficient requires consistent practice.

The problems in the textbook and those completed during class are your opportunities to practice. You are expected to maintain a steady level of effort and complete all assigned problems each day.

You are encouraged to discuss homework with your classmates, but all work you submit must be your own. Homework should be turned in on the day you come to take the exam.

Do not fall behind. Write on only one side of each page, and staple multiple pages together. No late homework will be accepted.

Quizzes: Frequent quizzes on homework will be given at the end of the class period. There will be no make-up for missed quizzes.

Exams: There will be two 120-minute exams. A make-up exam will be allowed **only** under exceptional, justifiable circumstances, and you must be prepared to provide documentation to substantiate your request. The exams will be held on **October 20** and **November 24**.

The final exam will cover the entire course and will be given on Thursday, December 10, from 6:15 PM to 8:15 PM.

Attendance: Please make every effort to arrive at class on time. Regular attendance is essential to your success, and while I am fully committed to helping you do well, I can only do that if you are present. I know balancing life and classes is challenging, so please use the course calendar to help plan your quarter. If an emergency comes up and you miss material, reach out right away so we can work together on a plan to get you caught up. Please note that if you stop participating without letting me know, you may be dropped from the class. You can also drop the course yourself if needed. The last day to drop without a W is October 2, and the last day to drop with a W is November 13.

Evaluation: Grade will be determined on the basis of total points earned. The following scale will be used.

Homework	30	A	426-450
Labs	30	A-	400-425
Quiz	40	B+	374-399
Exams	200	B	348-373
Final	150	B-	322-347
		C+	297-321
		C	272-296
		D	247-271
		F	000-246

	Text: <u>Statistics: Understanding Uncertainty</u> , Fourth Edition		The following schedule is tentative, subject to change any time.
Week #	Topic	section	Problems
1	Uncertainty, Randomness & Data	1.1	2 & 4
	Uncertainty, Randomness & Data	1.3	2 to 10
	Uncertainty, Randomness & Data	1.4	1 to 10
	Data production and random sampling	1.5	3 & 4
	The how and why of designing statistical experiments	1.6	5 and 7a-7c only
	Mastery Problems for chapter 1		11
	How are data described?	2.2	1 & 4
	Describing the center of data	2.3	1, 2, 4, 6, 7, and 10
2	Describing the spread of the data	2.4	1, 6, 7, and 8
	Chapter 2 problems		3, 9, 12, 13 (a to d only), and 15
	Mastery Problems for chapter 2		1
	Sample spaces and probability models	3.2	1, 5, and 6
	Conditional probability	3.5	4, 6, 10
3	Chapter 3 problems		1 and 2
	Mastery Problems for chapter 3		1, 2, 4a, 4c, 4d
	Discrete probability distribution	4.1	2, 3, and 5
	Expected Value	4.2	2, 3, 5, 6.
4	The binomial distribution	4.4	1, 2, 3, 4, 6, 17, 25
	The Poisson distribution and Review for exam1		Will be given in class.
	Mastery Problems for chapter 4		1a, 1b, 1c, 6a, 6b, 6c
5	Review and Exam1		Tuesday, October 20
	Uniform Dist.	5.3	4
	How to apply the Normal distribution	5.5	12, 18, 19, 20
	Mastery Problems for chapter 5		3(a to f only)
	The Central Limit Theorem & its applications	Ch. 6	5a, 5b, 5d, 6,
6	Test Yourself chapter 6		3 and 5
	Mastery Problems for chapter 6		2 (a to d only)
	Confidence Interval and find sample size	Chapter 7	1, 2, 3, 4, 6 (a-d only), 9, 14
7	Mastery Problems for chapter 7		2(a to e only),
	Confidence Interval with small sample size	9.2	1, 2, 6
	Confidence Interval for population standard deviation	9.5	2, 3, and 5a only
8	Hypothesis testing about a population mean when sigma is known	8.1	1, 2, 3, 6, 12
	Hypothesis testing about a population proportion and Type I and Type II errors	8.1	12
9	Mastery Problems for Chapter 8		3, 4 (a-d only), 6
	Hypothesis testing about a population mean when sigma is unknown	9.2	7
	Chapter 9 problems and Review for exam 2		7 and 9
10	Exam 2		Tuesday, November 24
	Comparing two population paremeters	10.3	2 and 3
	Mastery Problems for chapter 10		7 (a and c only)
	One-Way Analysis of Variance	11.3	3
	Test Yourself chapter 10		1, 2, 7, 8
11	Applications of the Chi-square distribution	11.1	1, 4, 5
	Applications of the Chi-square distribution	11.2	3, 4, 5, 6
	Simple Linear Regreesion Analysis	12.1	1, 2, 3
12	Review for final.		
	Final Examination		Thursday, December 10: 4:00 PM to 6:00 PM

Student Learning Outcome(s):

- Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.
- Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
- Collect data, interpret, compose and evaluate conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

Office Hours:

3:15 PM - 3:55 PM

E31 T,TH

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