STAT 108 Statistics for Everyday Life

COURSE SYLLABUS

Meets	MW 11:00am – 12:15pm in PH1-141
Instructor	Dr. Olga Korosteleva
Office Location	FO3 - 208
E-mail Address	Olga.Korosteleva@csulb.edu
Office Phone	(562)985-1941
Webpage	www.csulb.edu/∼okoroste
Office Hours	MW 10:00am-10:45am, 12:20pm-1:50pm
Graduate Assistant	Mr. Huy Pham
Mr. Pham's Office Hours	Th 4pm-6pm in FO3-208

Course Goals You are expected to learn the fundamental principles and applications of statistics.

Textbook *"Introductory Statistics"* by Prem S. Mann, John Wiley & Sons, Inc., 2012 (8th edition). You will be required to purchase an account on wileyplus.com which provides a digital copy of the text and access to online homework.

Calculator You will need a scientific calculator. You are responsible for learning how to use it.

Attendance and Makeups Class attendance will not be checked, but missing a class is frowned upon. In case you have to miss a quiz or midterm, talk to your instructor in advance, so that a very-much-frowned-upon makeup can be arranged for you.

Adding Course If you would like to add the course, the instructor may give you the permission to register. It is your responsibility to finish the process of enrollment.

Withdrawal Policy The deadline for dropping the course without college dean's signature is Friday, April 17, 2015.

Disability If you have a verified disability, and you need extra time and/or special accommodations for exams, notify your instructor in advance.

Assignments and Exams There will be four online homework assignments, four in-class 15-minute quizzes, three midterm exams, and a non-cumulative final exam. Quizzes and exams are CLOSED BOOK. A formula sheet is allowed. The quizzes and exams are multiple choice. You are responsible for keeping track of the course schedule, and for buying eight scantron forms 882-E (100 questions, two-sided, A-E standard bubble).

Course Webpage The course webpage is located at *www.csulb.edu/∼okoroste* in the folder "STAT 108". It will contain updated grades, syllabus, schedule, sample quizzes, reviews for exams, and solutions to quizzes, and exams.

WileyPlus Account To complete online homework assignments, you have to purchase an account on wileyplus.com. The link to the course page is *http://edugen.wileyplus.com/edugen/class/cls435771/*

Final Grade Your final grade is based on your total points of a possible 700: 50 points for each of the four homeworks, 25 points for each of the four quizzes, 100 points for each of the three midterm exams, and 100 points for the final exam. Grades will be based on the traditional 90% & above = A, 80%-89% = B, 70%-79% = C, 60%-69% = D, and 59% & below = F.

STAT 108 - 01 Course Schedule

No.	*Date*	*Topic*	*Section*
1	W, Jan. 21	Organizational questions, What is statistics?	
		Population versus sample, Basic terms, Types of variables	1.1 – 1.5
2	M, Jan. 26	Cross-sectional versus time series data, Summation notation,	1.5, 1.7
		Raw data, Organizing and graphing qualitative data	2.1
3	W, Jan. 28	Organizing and graphing quantitative data, Shapes of	
		histograms, Measures of central tendency	2.2, 3.1
4	M, Feb. 2	Measures of dispersion, Use of standard deviation	3.2, 3.4
5	W, Feb. 4	Measures of position, Box-and-whiskers plot, Experiment,	3.5, 3.6
		outcomes, and sample space	4.1
6	M, Feb. 9	Calculating probability, Counting rule, Marginal and	
		conditional probabilities, Mutually exclusive events	4.2, 4.3, 4.6
7	W, Feb. 11	Independent versus dependent events, Complementary	
		events, Intersection of events, Multiplication rule	4.4
8	M, Feb. 16	Union of events, Addition rule, Probability distribution	4.5
		of a discrete random variable	5.1, 5.2
	W, Feb. 18	**Homework 1 is due**, **Quiz 1**, **Review for first midterm exam**	
	M, Feb. 23	**First midterm exam**	
9	W, Feb. 25	Mean and standard deviation of a discrete random variable	5.3
		Factorials, combinations, and permutations	4.6
10	M, Mar. 2	Factorials, combinations, and permutations, Binomial	4.6
		probability distribution	5.4
11	W, Mar. 4	Continuous probability distribution, Normal and	6.1
		standard normal distributions	6.2
12	M, Mar. 9	Standardizing normal distribution, Applications of normal	
		distribution, Determining z and x values when an area under	
		the normal distribution curve is known	6.3, 6.4
13	W, Mar. 11	Sampling distributions of $\bar{x}$ and $\hat{p}$	7.1 – 7.6
14	M, Mar. 16	Confidence interval, Estimation of a population mean: σ known	8.1, 8.2
	W, Mar. 18	**Homework 2 is due**, **Quiz 2**, **Review for second midterm exam**	
	M, Mar. 23	**Second midterm exam**	
15	W, Mar. 25	Estimation of a population proportion: large samples	8.4
	M, Mar. 30	**Spring break – no classes**	
	W, Apr. 1	**Spring break – no classes**	
16	M, Apr. 6	Introduction to hypotheses testing, Hypothesis tests	9.1
		about μ: σ known	9.2
17	W, Apr. 8	Hypothesis test about a population proportion: large samples	9.4
18	M, Apr. 13	Hypothesis test about two population proportions	10.5
	W, Apr. 15	**Homework 3 is due**, **Quiz 3**, **Review for third midterm exam**	
	M, Apr. 20	**Third midterm exam**	
19	W, Apr. 22	The t-distribution, Hypothesis test for two means: $\sigma_1 = \sigma_2$	10.2
20	M, Apr. 27	Hypothesis test for two means: $\sigma_1 \neq \sigma_2$	10.3
21	W, Apr. 29	Simple linear regression	13.1
22	M, May 4	Linear correlation	13.4
	W, May 6	**Homework 4 is due**, **Quiz 4**, **Review for final exam**	