

Spring 2019 MATH-M261 Course Syllabus

STATISTICAL INFERENCE (2cr)(2)

When & Where: 4:00p–4:50p MW, NS 225
Textbook: *Probability and Statistics for Engineers and Scientists*(9th Ed.) ,
 by Walpole, Myers, Myers, and Ye
Instructor: Dr. Zhong Guan. Office: NS325, zguan@iusb.edu , Phone: 520-4430
Office hours: TWR: 9:30a -11:30a or by appointment.
Course Web page: <http://pages.iu.edu/~zguan/m261>

Course Description and Prerequisites: Estimates for population parameters, estimation judged by unbiasedness and mean square error, t-distribution, chi-square distribution, philosophy of hypothesis testing, probabilities in making conclusions after testing, estimation and hypothesis testing, linear least square regression equation for prediction and forecast. Prerequisite: M260

Evaluations/Rules:

- 1) The first 10 minutes of each class are used to answer questions. New material follows.
- 2) Homework will be collected at the beginning of the class on the due day. *No late homework is accepted after 5 minutes of class* (So do not be late for class.) You are strongly suggested to do all assignments and turn them in on time. Success in this class requires a lot of practice on homework problems. You are encouraged to discuss homework problems with your classmates and the instructor. But you must write the solutions of the homework problems *independently*. Give detailed explanation for how you obtain your answers *or no credit*. *Two* lowest homework grades will be dropped.
- 3) There will be *five (5)* quizzes, *two (2)* midterm tests and one final exam. Quiz problems will be similar to the homework problems and class examples. *One* lowest quiz grade will be dropped allowing for one unexpected absence on quiz days. *No makeup* quiz will be given.
- 4) Missed test and final cannot be made up without adequate justification for the absence. You must tell me before the test if you know in advance that you will have a legitimate conflict.
- 5) Quizzes, tests, and final exam are all close book, close notes. Except a scientific calculator or a graphing calculator TI-83/84/86, the students *cannot* use laptop, iphone, ipad, and any other electronic device with programming, storage abilities, and internet access.
- 6) Each of the first two absences costs you 5 points. Each of any additional absence costs 10 points. Come to class before it starts and stay in class until it ends. Respect others respect yourself.
- 7) Your final grade will be determined by

	Time	Weight	Points
Attendance:		5%	50 points
Homework:		20%	200 points
Quizzes:	<i>Wednesdays</i> of weeks 2, 4, 8, 11, 15.	10%	100 points
Tests:	<i>Wednesdays</i> of weeks 6, 13.	$2 \times 20 = 40\%$	$2 \times 2 \times 100 = 400$ points
Final:	Wed, May 1, 2019 at 4:00p	25%	$2.5 \times 100 = 250$ points
Total		100%	1000 points

Academic Honesty: It is the responsibility of the student to know of the prohibited actions such as cheating, fabrication, plagiarism, academic, and personal misconduct, and thus, to avoid them. All students are held to the standards outlined in the code. Please reference the entire code for a complete listing (www.dsa.indiana.edu/Code/). Any violation may result in serious academic penalty, ranging from receiving a warning, to failing the assignment, to failing the course, to expulsion from the University.

DISABILITIES STATEMENT: Every attempt will be made to accommodate qualified students with disabilities (e.g. mental health, learning, chronic health, physical hearing, vision neurological, etc.). You must have established your eligibility for support services through the Disability Support Services office (Admin Bldg

Rooms 167-170; e-mail: sbdss@iusb.edu; telephone number 574-520-4460). Once the DSS office has provided you with a letter attesting to your needs for accommodations, bring the letter to your professor. Note that services are confidential, may take time to put into place and are not retroactive; captions and alternate media for print materials may take three or more weeks to get produced. For more information, please visit the web site for the Disability Support Services www.iusb.edu/sbdss.

Tentative Schedule:

Week	Dates	Lecture	Quiz/Test Wednesdays/Wednesdays
1	1/7, 1/9	6.1–6.4	
2	1/14, 1/16	6.5	Quiz1
3	1/21, 1/23	6.6,6.7	(MLK Day: 1/21)
4	1/28, 1/30	8.1,8.2	Quiz2
5	2/4, 2/6	8.3, 8.4	
6	2/11, 2/13	8.5, Review	Test 1
7	2/18, 2/20	8.6, 8.7	
8	2/25, 2/27	8.8	Quiz3
9	3/4, 3/6	9.2, 9.3	(3/10: eDrop ends)
10	3/11, 3/13		(Spring Break Week)
11	3/18, 3/20	9.4, 9.5	Quiz4
12	3/25, 3/27	9.6, 9.7	
13	4/1, 4/3	9.8, 9.9	Test 2
14	4/8, 4/10	9.10,9.11	
15	4/15, 4/17	10.1, 10.2	Quiz5
16	4/22, 4/24		
17	Wed, May 1, 2019 at 4:00p		Final Exam