

**STT 160
DEPARTMENTAL SYLLABUS**

(Revised 8/09)

COORDINATORS: Lisa Wellinghoff, Dr. Thaddeus Tarpey

TEXT: Elementary Statistics Using Excel, Fourth Edition by Mario F. Triola, (Pearson Addison Wesley).

COMPUTER LAB (new): Excel one hour per week (and/or Minitab if needed at Instructor discretion).

COURSE INFORMATION (new): Area I G.E. substitution course, meets G.E. requirements (goals below). This course primarily serves Nursing and Psychology majors, 4 hours lecture, 1 hour lab, not a W.I. course.

OFFICE OF DISABILITY SERVICES LOCATION: 023 Student Union

CHAPTER/SECTIONS		(Instructor can add or delete) HMWK. LIST		COMMENTS
1/1-5 Overview	1.2	7,9-11,19-22,23-26		
	1.3	5,8,9,12-14,16,17,22,23,29-31		
	1.4	7,9,10,12-15,17,19,25,27,30		
	1.5	5-8,12,13,16,19,20		
2/1-4 Graphs	2.2	5-9,11,13,15,18,19		Connect bars on histograms
	2.3	5,7-11,13,15		
	2.4	5,6,9,10,15-18,22,25,26		
3/1-4 Calculations	3.2	6,7,9-12,14,15,19,21,22,29,30,33		Skip mid-range
	3.3	6,7,9,11-15,17,18,31,33-36		
	3.4	5,6,9-11,13-17,19-22,26-30,35		
4/1-2,4 Probability (4.7 Opt.)	4.2	5,11,13,15,21-24,28,29,31,33,35		Can do other examples as needed
	4.4	5-8,13,15,17,22,25,27		
	4.7	16,19,25-27		
6/1-5 Normal and Standard Normal	6.2	5-10,12-14,16,20-22,25,26,29, 36,37,41,46-49,50-52		
	6.3	6-8,10-13,15-19,23,25,27,29, 31		
	6.4	9,11-13,19		
	6.5	5,7,9,12-15,17,19		
7/1-2,4 C.I.– Mean/Proportion	7.2	5-23odd,27,29,31,33,34,36,37,39, 41,45		Interpret C.I.'s also, omit determining n
	7.4	7,10-12,15,19,20,22,23,25,27,28		
8/1-3,5 Hypothesis Testing (Also give ex. of CI for difference of 2 means, 2 proportions)	8.2	5,7,9,10,12,13,17- 23odd,26,29,31,33,43		Skip power
	8.3	5-7,9,10(2-sided),11,12,15- 17,19,23(2-sided),27		
	8.5	5-7,11,13,15-17,19,20(2-sided),25- 27		
10/1-3 Linear Regression	10.2	7,9,11,15,17-21,23,27,33,35		Give Excel printouts with r and r ² , slope, intercept, t, and p-value Interpret r, r ² , slope, intercept, and run t test
	10.3	7,9,11,13,17-21,23		
11/3 Chi-Square Test	11.3	5,7-9,11,14-16,19,21		2x2 tables only (1 df)
12/2 One-Way ANOVA (Optional)	12.2	5,7,9-14		Give printout (can use Minitab for F test and multiple comparisons)

It is also recommended that the students are shown at least one journal article with an emphasis on how to interpret the p-values. This can be made into a lab or a group or homework assignment, at the Instructor's discretion.

G.E. GOALS

A bachelor's degree awarded by a university implies more than career preparation or specialized technical competency. A university education should be broadly based in order to promote intellectual understanding, encourage breadth and flexibility of perspective, and provide students an opportunity to develop skills and knowledge that will form the basis for their life-long learning. Accordingly, the General Education Program at Wright State University is a planned and coherent program that is designed to help students:

- Sharpen critical thinking, problem solving, and communication skills,
- Learn about the aesthetic, ethical, moral, social, and cultural dimensions of human experience needed for participation in the human community, and
- Increase knowledge and understanding of the past, of the world in which we live, and how both past and present have an impact on the future.

AREA I LEARNING OUTCOMES

- Use, formulate, and interpret mathematical models
- Summarize and justify analyses of mathematical models or problems using appropriate words, symbols, tables, and/or graphs