

STT 160
DEPARTMENTAL SYLLABUS
(Revised 6/04)

COORDINATOR: Karen Brackenridge.

TEXT: *Elementary Statistics, Ninth Edition* by Mario F. Triola, (Pearson Addison Wesley).

CALCULATOR: Minimum of scientific calculator with statistical mode, demonstrations may be done in class with a TI-82 or TI-83.

COMPUTER: Optional to go to computer lab to use Excel and/or Minitab.

COURSE INFORMATION: Meets General Education (G.E.) and Writing Intensive (W.I.) requirements (goals attached). This course primarily serves Nursing and Psychology majors.

WRITING INTENSIVE INFORMATION: Students must complete a written summary of a scientific journal article (list attached). The W.I. grade is given separately from the course grade at the end of the quarter as pass/fail, but the teacher may choose to make the paper part of the overall course grade.

(Instructor can add or delete)

CHAPTER/SECTIONS		HMWK. LIST	COMMENTS
1/1-4 Overview	1.2 1.3 1.4	1-20 1-26 1-26	
2/1-7 Graphs & Calculations	2.3 2.4 2.5 2.6 2.7	5-8,21-25,27,34 1-12,22,25 1-12,24-26 1-10 1,3	Connect bars on 7-8 No mid-range Boxplot only from 2.7
3/1-2 Probability (Opt. 3.7)	3.2 3.7	1-28 9-29	Can do other examples as optional
4/3-4 Binomial Distribution (Optional)	4.3 4.4	1-24,31 5-16	Idea of random variable from 4.2, use binomial table to answer questions
5/1-3,5 Normal and Standard Normal	5.2 5.3 5.5	1-40 1-25 1-20	Discuss ideas from 5.4
6/1-2,4 C.I.–Mean/Proportion	6.2 6.4	25-32 13-18	Interpret C.I.'s also, discuss use of z-interval when $n \geq 30$ or when σ is known (t is used for unknown σ)
7/1-3,5 Hypothesis Testing	7.2 7.3 7.5	1-40 1-18 1-28	Discuss use of z test when $n \geq 30$ or when σ is known (t is used for unknown σ)
8/1-3 2 Means/Proportions	8.2 8.3	9-10,12-18,24,26 5-10,12-16	C.I. (containment of zero idea) and p-value given for hypothesis test
9/1-3 Linear Regression	9.2 9.3	1-14 1-14	Give r, best-fit line, t, and p-val (printout) Interpret r, r^2 , slope, and intercept, and run t test
10/3 Chi-Square Test	10.3	1-8,14,17	
11/2 One-Way ANOVA	11.2	1-8	Give printout (can use Minitab for F test and multiple comparisons)

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 growth, cultivate informed understanding, encourage breadth and flexibility of perspective, and foster a critical examination of social, cultural, and scientific realities. Thus the goals of the GE program are to:

- 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.

WRITING ASSIGNMENT IN STT 160

Purpose:

To become familiar with scientific research, to learn how statistics is an integral part of research, and to learn how to communicate statistical results in written form.

Goals of the Writing Across the Curriculum Program:

- To help students think critically about the course material by writing about it.
- To give students an opportunity to improve their editing skills.
- To help students learn the conventions of writing in their own field of study.

LIST OF RESEARCH ARTICLES (rev. 6/04)

(Located in the Fordham Health Science Library in the Medical Science building, first floor, and/or on-line at the WSU library website – click on electronic journals on the right from a campus computer or from WSU dial-up)

American Journal of Clinical Nutrition

1. “Detection of overweight and obesity in a national sample of 6-12-y-old Swiss children”, Vol. 79, No. 5, May 2004, pp.838-843.
2. “Breakfast cereal fortified with folic acid, vitamin B-6, and vitamin B-12 increases vitamin concentrations and reduces homocysteine concentrations: a randomized trial”, Vol.79, No. 5, May 2004, pp.805-811.

American Journal of Obstetrics and Gynecology

3. “Heavier workload, less personal control: Impact of delivery on obstetrician/gynecologists’ career satisfaction”, Vol. 190, No. 3, March 2004, pp.851-857.
4. “Diet-controlled gestational diabetes mellitus does not influence the success rates for vaginal birth after cesarean delivery”, Vol. 190, No. 3, March 2004, pp.790-796.
5. “Threatened abortion: A risk factor for poor pregnancy outcome, a population-based screening study”, Vol. 190, No. 3, March 2004, pp.745-750.
6. “Randomized trial of inhaled beclomethasone dipropionate versus theophylline for moderate asthma during pregnancy”, Vol. 190, No. 3, March 2004, pp.737-744.

Hypertension

7. “Adverse Prognostic Significance of New Diabetes in Treated Hypertensive Subjects”, Vol. 43, No. 5, May 2004, pp.963-969.
8. “Glucose-Cholesterol Interaction Magnifies Coronary Heart Disease Risk for Hypertensive Patients”, Vol. 43, No. 5, May 2004, pp.983-987.

International Journal of Sports Medicine

9. “Influence of Physical Activity on Depression and Anxiety of Former Elite Athletes”, Vol. 24, No. 8, November 2003, pp.609-619.
10. “The Effects of Exercise Training on Markers of Endothelial Function in Young Healthy Men”, Vol. 24, No. 6, August 2003, pp.404-409.
11. “Effects of Short- and Long-Term Detraining on the Metabolic Response to Endurance Exercise”, Vol. 24, No. 5, July 2003, pp.320-325.

Journal of Advanced Nursing

12. “The relationship of critical thinking skills and critical thinking dispositions of baccalaureate nursing students”, Vol. 43, No. 6, September 2003, pp.569-577.
13. “Nurses’ attitudes towards older residents with long-term schizophrenia”, Vol. 43, No. 6, September 2003, pp.616-622.

Journal of American College Health

14. “Athletic Status and Drinking Behavior in College Students: The Influence of Gender and Coping Styles”, Vol. 52, No. 6, May/June 2004, pp.269-273.
15. “Gambling and Other Risk Behaviors on University Campuses”, Vol. 52, No. 6, May/June 2004, pp.245-255.
16. “Tobacco, Depression, and Lifestyle Choices in the Pivotal Early College Years”, Vol. 52, No. 5, March/April 2004, pp.213-219.

Journal of American College Health

17. "Condom Use Among Latino College Students", Vol. 52, No. 4, January/February 2004, pp.169-178.
18. "Colleges Respond to Student Binge Drinking: Reducing Student Demand or Limiting Access", Vol. 52, No. 4, January/February 2004, pp.159-168.

Journal of Consulting and Clinical Psychology

19. "Does Maternal Warmth Moderate the Effects of Birth Weight on Twins' Attention-Deficit/Hyperactivity Disorder (ADHD) Symptoms and Low IQ?", Vol. 72, No. 2, April 2004, pp.218-226.
20. "Relationship of Catastrophizing to Fatigue Among Women Receiving Treatment for Breast Cancer", Vol. 72, No. 2, April 2004, pp.355-361.
21. "Retrospective and Prospective Reports of Precipitants to Relapse in Pathological Gambling", Vol. 72, No. 1, February 2004, pp.72-80.
22. "Cognitive Trauma Therapy for Battered Women with PTSD (CTT-BW)", Vol. 72, No. 1, February 2004, pp. 3-18.
23. "Long-Term Influence of Duration and Frequency of Participation in Alcoholics Anonymous on Individuals with Alcohol Use Disorders", Vol. 72, No. 1, February 2004, pp.81-90.

Journal of Neurotrauma

24. "The Effects of Admission Alcohol Level on Cerebral Blood Flow and Outcomes after Severe Traumatic Brain Injury", Vol. 21, No. 5, May 2004, pp.575-583.

Journal of Nursing Administration

25. "Enhancing Collaborative Communication of Nurse and Physician Leadership in Two Intensive Care Units", Vol. 34, No. 2, February 2004, pp.60-70.
26. "Decreasing Turnaround Time Between General Surgery Cases: A Six Sigma Initiative", Vol. 34, No. 3, March 2004, pp.140-148.
27. "The Meaningful Retention Strategy Inventory: A Targeted Approach to Implementing Retention Strategies", Vol. 34, No. 1, January 2004, pp.10-18.
28. "Nurse Staffing Models, Nursing Hours, and Patient Safety Outcomes", Vol. 34, No. 1, January 2004, pp.41-45.

Journal of Pediatric Surgery

29. "Routine Cesarean Delivery Does Not Improve the Outcome of Infants with Gastroschisis", Vol. 39, No. 5, May 2004, pp.742-745.

Medical Teacher

30. "Effect of Curriculum Reform on graduating student performances", Vol. 26, No. 3, May 2004, pp.244-249.

Social Science and Medicine

31. "Health Status and Canada's Immigrant Population", Vol. 57, No. 10, November 2003, pp.1981-1995.
32. "Social influences on substance-use behaviors of gay, lesbian, and bisexual college students: findings from a national study", Vol. 57, No. 10, November 2003, pp.1913-1923.