

STATISTICS 6610**APPLIED NONPARAMETRIC STATISTICS AUTUMN 2016**

INSTRUCTOR: Professor Omer Ozturk e-mail: ozturk.4@osu.edu
OFFICE: Cockins Hall Room 205C Office Phone: 292-3346

OFFICE HOURS: Monday and Wednesdays, 1:15 – 2:15 p.m.
MEETING TIMES MWF 10:20- 11:15 am, Cockins Hall 232

COURSE TEXT: Hollander, M., Wolfe, D. A., & Chicken, E., *Nonparametric Statistical Methods, Third Edition* (2014), Wiley.

COURSE OUTLINE (and Corresponding Textbook Sections):

Review of Basic Concepts from Classical (Parametric) Statistics, and Comparison with the Nonparametric Approach (1.1 - 1.6 and supplemental material)

The Dichotomous Data Problem (2.1 - 2.3)

Sign Test Procedures for the One-Sample Location Problem and for Paired Replicates Data; Asymptotic Relative Efficiency (3.4, 3.5, 3.6, 3.8, 3.11)

Signed Rank Procedures for the One-Sample Location Problem and for Paired Replicates Data (3.1, 3.2, 3.3, 3.7, 3.11)

The Two-Sample Location Problem (4.1, 4.2, 4.3, 4.5)

Kolmogorov-Smirnov Two-Sample Test for General Differences (5.4)

The One-Way Layout; Multiple Comparisons Procedures (6.1, 6.2, 6.5, 6.7, 6.8)

Kendall's Tau Procedures for the Independence Problem (8.1, 8.2)

The Two-Way Layout (7.1, 7.2, 7.3, 7.4, 7.5)

Note: If time allows, we may cover some additional sections of the textbook. Also, occasionally some supplemental material, from outside the textbook, will be covered in lecture. You are responsible for all the material presented in lecture.

GRADING SCHEME (Tentative):

Homework Assignments	20%
Two Midterm Examinations (20% each)	40%
Final Examination	40%

In addition, several optional "bonus homework problems" will be given in lecture, that elaborate on some of the more difficult (and hopefully intriguing) aspects of the course material.

The final exam is on Tuesday, Dec 13 10:00am-11:45am in the usual lecture classroom. No "early" final exams will be given, so make your travel plans accordingly.

Classroom Policies: Use of personal computers, cell phones, etc. is prohibited during lecture. Please do not read the newspaper or other extraneous materials during lecture. Homework will be due at the start of class; please do not work on the homework during lecture.

Attendance Policy: In accordance with University Rules, a student who is absent from three or more (not necessarily consecutive) classes, without contacting the instructor with a valid excuse, may be reported for possible disenrollment. To prevent disenrollment, the instructor should be contacted (e-mail: ozturk.4@osu.edu) within 24 hours of the third (and any subsequent) absence.