

GEN 2101 Biostatistics

Department:	Peter O'Donnell Jr. School of Public Health
Course:	Biostatistics, Critical Reading GEN 2101 Joan S. Reisch, Ph.D.
Faculty Coordinator:	2101 Joan S. Reisch, Ph.D.
Hospital:	N/A
Periods offered:	3, 4
Length:	4 weeks
Max number of students:	5
First Day Contact:	Dr. Joan Reisch - 214-648-2028
First Day Time:	First Monday of period at 10:00 a.m.
First Day Place:	E1.401
Prerequisites:	None

I. Course Objectives:

The objective of the course is to address the physician's need to critically evaluate the study design and statistical analysis in medical journal articles. Selected articles from the medical literature are the basis for the course; many are from the series "Users Guides to the Medical Literature" published in the Journal of the American Medical Association. Additional recent articles (often the New England Journal of Medicine and the Journal of the American Medical Association) illustrating the statistical and experimental design concepts are chosen and the reading assignments are based as much as possible on the medical specialty interests of the participating students.

II. Methods of instruction:

A) Didactic (schedule, topic, faculty)

The format is twice weekly seminars for discussion and critical review of articles from leading medical journals. On the first day of this directed reading course, students receive the course schedules with reading assignments and all reading materials. They are introduced to background materials including statistical concepts, journal article structure, and statistical reporting to be read outside of the session. Then an interactive program for statistical data analysis (WINKS) is described and the student is instructed on how to acquire the software along and given instructions for its use. Meetings are scheduled on Monday and Wednesday mornings; the first is on the first Monday at 10:00 a.m.

Each class lasts 1.5 to 2 hours. The student should expect to spend 3 to 5 hours of preparation for each class.

Drs. Joan Reisch and Linda Hynan of the Division of Biostatistics in the Department of Clinical Sciences lead the team which includes statistical

GEN 2101 Biostatistics

consultants for U. T. Southwestern Medical Center: Dr. Abu Minhajuddin and Dr. Song Zhang.

B) Student responsibilities (and to whom accountable)

Students are expected to attend seminars; read and prepare in advance an oral review of the assigned article (usually one per session for each student) and read the articles assigned to others to allow meaningful participation in their discussion. Each student will select an article for discussion and review at the final session.

Drs. Reisch and Hynan, with advice of the other faculty participants, will assign grades.

III. Method of evaluation of students:

The students are assessed for their participation in seminars along with evidence of their preparation for discussion of all articles.