

ST 520: Statistical Principles of Clinical Trials and Epidemiology

Fall, 2011

Textbook	None. Lecture notes and slides are available for download from the class website www4.stat.ncsu.edu/~dzhang/st520/index.html
Reference	<ol style="list-style-type: none">Fundamentals of Clinical Trials (4th edition) by L.M. Friedman, C.D. Furberg and D.L. DeMetsGroup Sequential Methods with Applications to Clinical Trials by C. Jennison & B.W. Turnbull
Class Hours	Monday & Wednesday, 11:45 am - 1:00 pm
Location	Room 1216 SAS Hall
Instructor	Dr. Daowen Zhang 5122 SAS Hall Tel: 515-1933 Email: zhang@stat.ncsu.edu
Office Hours	3:30-4:30pm Monday, Wednesday or by appointment
Teaching Assistant	Peng Yang Email: pyang4@ncsu.edu
TA Office Hours	TBA (Room 1101, SAS Hall)
Evaluation	Homework: 20% Mid-term (in class, open book & open notes): 35%. It will be given sometime (10/5/11?) before the fall break (10/6/11-10/7/11). Final (in class, open book & open notes, comprehensive): 45%. Exam time to be announced
Course description	This course will introduce some basic statistical concepts and methods used in Epidemiology and will focus on the statistical principles and methods used in clinical trials, including phase I to IV clinical trials. Although the class will have emphasis on phase III trials, we will also discuss the feature and statistical issues in phase I and II clinical trials. For phase III trials, we will discuss ways of treatment allocation that will ensure valid inference on treatment comparison. Other topics include sample size calculation, survival analysis and early stopping of a clinical trial and noncompliance.
Online evaluation	Online class evaluations will be available for students to complete during the last two weeks of class. The website is https://classeval.ncsu.edu . Any comments and suggestion on this course are greatly appreciated.