

Syllabus for Biostatistics II (M21-570)

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Co-coursemasters

Biostat 2: Kim Trinkaus, PhD. ktrinkaus@wustl.edu, 362-3686

Course grader (second course): Mike Wallendorf, PhD. mwallendorf@wustl.edu, 362-3284

Course text: The course is based entirely on instructor notes and no text is required. The book *Fundamentals of Biostatistics* by Bernard Rosner is a recommended reference.

40% of the grade will be based on the final exam, 30% on quizzes, and 30% on homework.

Syllabus for Biostatistics II: All classes meet from 8:00 to 11:30 on Monday and Wednesday.

	Topics	Presenter
10/16/17	Fall break – no class	
10/18/17	Non parametric survival analysis, logrank and generalized Wilcoxon tests, Cox regression analysis	Schechtman
10/23/17	Lab: Non parametric survival analysis	Schechtman
10/25/17	Conditional logistic regression, logit analysis with multinomial and ordered outcomes, Poisson regression	Trinkaus
10/30/17	Continuation of prior lecture	Trinkaus
11/1/17	Lab: conditional logistic regression, Poisson regression	Trinkaus
11/6/17	Longitudinal data analysis, mixed models and GEE models	Chen
11/8/17	Longitudinal/mixed models (continued)	Chen
11/13/17	Handling missing data in longitudinal models	Chen
11/15/17	Lab: longitudinal models	Chen
11/20/17	First half: Basics of sample size computations. Second half: Collecting high quality data in clinical research. Assign students to read papers to be discussed on last day of class	Schechtman
11/22/17	Thanksgiving – no class	
11/27/17	Resampling methods	Trinkaus
11/29/17	Lab: Resampling methods	Trinkaus
12/4/17	Introduction to bioinformatics and statistical genetics	Gu
12/6/17	Reading medical literature, a classic clinical trial	Schechtman
12/11/17	Discuss papers read by students, prepare for final exam	Schechtman, Trinkaus
12/13/17	Final exam	