

Syllabus for Biostatistics I

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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, 40% on quizzes, and 20% on homework.

Syllabus for Biostatistics I: All classes meet from 9:00 to 12:30 and 1:30-4:30 on Monday, Wednesday and Friday.

Date	Topics	Time	Presenter
7/22/19	Hypothesis test logic, measures of central tendency, standard deviation and standard error, confidence intervals, t-tests, Wilcoxon's test	9:00	Schechtman
7/22/19	Lab: hypothesis tests about means	1:30	Schechtman
7/24/19	Chi square tests, McNemar's test, goodness-of-fit tests, Mantel Haenszel procedures, measures of agreement, Kendall's tau, kappa statistics	9:00	Wallendorf
7/24/19	Lab: Hypothesis tests about proportions	1:30	Wallendorf
7/26/19	Simple and multiple linear regression, polynomial regression, correlation	9:00	Schechtman
7/26/19	Lab: Regression analysis	1:30	Schechtman
7/29/19	Analysis of Variance	9:00	Schechtman
7/29/19	Lab: Analysis of variance	1:30	Schechtman
7/31/19	Multi factorial analysis of variance	9:00	Wallendorf
7/31/19	Lab: Multi factorial analysis of variance	1:30	Wallendorf
8/2/19	Odds ratio, risk ratio, sensitivity and specificity, attributable risk, logistic regression, interpreting interactions in logistic regression, ROC curves	9:00	Schechtman
8/2/19	Lab: logistic regression	1:30	Schechtman
8/5/19	Conditional logistic regression, logit analysis with multinomial and ordered outcomes	9:00	Wallendorf
8/5/19	Lab: Conditional logistic regression	1:30	Wallendorf
8/7/19	Final exam	9:00	Schechtman