Course Outline (tentative) and Syllabus:

Week	Content
Week 1, 2	• Point Estimation • Method of moments • Likelihood function • Maximum likelihood equations • Unbiased estimator
Week 3	• Mean square error • Minimum variance unbiased estimator • Consistent estimator • Efficiency
Week 4	• Uniformly minimum variance unbiased estimator • Efficient estimator • Sufficient estimator • Jointly sufficient • Minimal sufficient statistic
Week 5	• Interval Estimation • Large Sample Confidence Intervals: One Sample Case
Week 6	• Small Sample Confidence Intervals for μ • Confidence Interval for the Population Variance • Confidence Interval Concerning Two Population Parameters
Week 7	• Some simple non parametric tests
Week 8	• Problem Session • Review for Midterm exam
Week 9,10	• Tests related to contingency tables
Week 11,12	• Type of Hypotheses • Two types of errors • The level of significance • The p-value or attained significance level
Week 13,14	• The NeymanPearson Lemma • Likelihood Ratio Tests • Parametric tests for equality of means and variances.
Week 15	• Problem Session • Review for Final Exam