

Statistics for Biomedical Researchers – UTHealth Postdoctoral Certificate Training Program**Fall 2019****IMM SRB 110****12 noon – 1pm****Instructor: Arko Barman, Ph.D.**

Date	Topic
Tuesday, September 10, 2019	<ul style="list-style-type: none">• Course overview• Basic terminology• Measures of central tendency, frequency distribution, and measures of dispersion
Tuesday, September 17, 2019	<ul style="list-style-type: none">• Basic concepts of probability• Conditional probability, joint probability, Bayes' Theorem
Tuesday, September 24, 2019	<ul style="list-style-type: none">• Sensitivity, specificity, positive and negative predictive values• Probability density functions, probability mass functions
Tuesday, October 1, 2019	<ul style="list-style-type: none">• Selected Probability distributions• Normal distribution
Tuesday, October 8, 2019	<ul style="list-style-type: none">• Sampling distributions• Central Limit Theorem
Tuesday, October 15, 2019	<ul style="list-style-type: none">• Interval Estimation• Confidence Intervals
Tuesday, October 22, 2019	<ul style="list-style-type: none">• Hypothesis testing• Type I and Type II errors
Tuesday, October 29, 2019	<ul style="list-style-type: none">• Categorical data analysis
Tuesday, November 5, 2019	<ul style="list-style-type: none">• Analysis of variance
Tuesday, November 12, 2019	<ul style="list-style-type: none">• Linear Regression• Correlation
Tuesday, November 19, 2019	<ul style="list-style-type: none">• Logistic Regression• Non-linear Regression
Tuesday, November 26, 2019	<ul style="list-style-type: none">• Survival Analysis