



Course Plan  
**ELEMENTARY STATISTICS AND PROBABILITY**  
 First Semester, School Year 2024-2025

Topic	Learning Materials to be provided	Assessment to be administered	Modality
<b>MIDTERM TOPICS</b>			
<b>Unit 1: Basic Concepts and Terminologies in Statistics</b> Topic 1: Definition and Importance of Statistics Topic 2: Basic Terms in Statistics Topic 3: Levels of Measurement	Slides, Recorded Lecture <a href="https://youtu.be/eIMX_AmmKWk">https://youtu.be/eIMX_AmmKWk</a>	Pen and paper quiz, activity sheets, Recitation	Online for the recorded lecture, Face to face for assessment
<b>Unit 2: Data Collection and Sampling Techniques</b> Topic 1: Data Collection Topic 2: Sampling Techniques	Slides, Recorded Lecture <a href="https://youtu.be/qfhh6oRdGaY">https://youtu.be/qfhh6oRdGaY</a>	Pen and paper quiz, activity sheets, Recitation	Online for the recorded lecture, Face to face for assessment
<b>Quiz (Unit 1 &amp; 2)</b>			
<b>Unit 3: Methods of Data Organization</b> Topic 1: Graphical Method (Chart) Topic 2: Tabular Method (Frequency Distribution Table) Topic 3: Textual Method	Slides	Pen and paper quiz, activity sheets, Recitation	Face to face both for lecture and assessment
<b>Unit 4: Descriptive Statistics</b> Topic 1: Measures of Central Tendency Topic 2: Measures of Variation Topic 3: Measures of Position (Quantiles)	Slides, Recorded Lecture <a href="https://youtu.be/k-ocZM4us98">https://youtu.be/k-ocZM4us98</a> <a href="https://youtu.be/knQ5WWEjdZY">https://youtu.be/knQ5WWEjdZY</a> <a href="https://youtu.be/uCfcV23QF6U">https://youtu.be/uCfcV23QF6U</a>	Pen and paper quiz, activity sheets, Recitation	Online for the recorded lecture, Face to face for assessment
<b>Quiz (Unit 3 &amp; 4)</b>			
<b>Unit 5: Probability and Counting Techniques</b> Topic 1: Fundamental Principle of Counting (FPC) and Alternative Principle of Counting (APC) Topic 2: Permutation Topic 3: Combination Topic 4: Probability	Handout with detailed solutions, Recorded Lecture APC wheels of chance explanation <a href="https://youtu.be/9jWEHz2EQdU">https://youtu.be/9jWEHz2EQdU</a> Permutation Part 1 <a href="https://youtu.be/fdacGoKqffo">https://youtu.be/fdacGoKqffo</a> Permutation Part 2 <a href="https://youtu.be/IRb3SfTYVYQ">https://youtu.be/IRb3SfTYVYQ</a> Permutation Part 3 <a href="https://youtu.be/JmNO1BpAAyo">https://youtu.be/JmNO1BpAAyo</a> Permutation Part 4 <a href="https://youtu.be/BYcHGt129AY">https://youtu.be/BYcHGt129AY</a> Permutation Part 5 <a href="https://youtu.be/6AGkKZxFvFw">https://youtu.be/6AGkKZxFvFw</a> Combination Part 1 <a href="https://youtu.be/niohBO--9Vo">https://youtu.be/niohBO--9Vo</a> Combination Part 2 <a href="https://youtu.be/4d2TKtOZm44">https://youtu.be/4d2TKtOZm44</a> Combination Part 3 <a href="https://youtu.be/uKK4GDq2_hY">https://youtu.be/uKK4GDq2_hY</a> Probability of Single Events Part 1 <a href="https://youtu.be/k5VgYXSozfQ">https://youtu.be/k5VgYXSozfQ</a> Probability of Single Events Part 2 <a href="https://youtu.be/nu2flfEX0UY">https://youtu.be/nu2flfEX0UY</a> Probability of Single Events Part 3 <a href="https://youtu.be/Ar4EkUXkVJc">https://youtu.be/Ar4EkUXkVJc</a> Probability of Single Events Part 4 <a href="https://youtu.be/9x4ofLVHQEY">https://youtu.be/9x4ofLVHQEY</a> Probability of Complementary Events <a href="https://youtu.be/A6gdaqUifxs">https://youtu.be/A6gdaqUifxs</a>	Pen and paper quiz, activity sheets, Recitation	Face to face for the topics FPC and APC  Online for the recorded lecture (Permutation, Combination, and Probability), Face to face for assessment



	<a href="https://youtu.be/-39e-1QsPe0">Probability of Mutually and Not Mutually Exclusive Events Part 1</a> <a href="https://youtu.be/QVSrgZBB7M8">Probability of Mutually and Not Mutually Exclusive Events Part 2</a> <a href="https://youtu.be/USS5gL6HMzk">Probability of Dependent and Independent Events Part 1</a> <a href="https://youtu.be/15SQ71NI9gI">Probability of Dependent and Independent Events Part 2</a> <a href="https://youtu.be/AWdCCYi1gaU">Probability of Dependent and Independent Events Part 3</a> <a href="https://youtu.be/SHvkdYRyQVE">Probability of Dependent and Independent Events Part 4</a> <a href="https://youtu.be/BUw9eu9IH10">Conditional Probability Part 1</a> <a href="https://youtu.be/KpiGjaxqSu0">Conditional Probability Part 2</a>		
<b>Quiz (Unit 5)</b>			
<b>MIDTERM EXAM</b>			
<b>FINAL TERM TOPICS</b>			
<b>Unit 6: Normal Distribution</b> Topic 1: The Concept of Normal Distribution Topic 2: Empirical Rule Topic 3: Standard Score Topic 4: Normal Curve Areas	Slides	Pen and paper quiz, activity sheets, Recitation	Face to face both for lecture and assessment
<b>Quiz (Unit 6)</b>			
<b>Unit 7: Hypothesis Testing</b> Topic 1: Hypothesis Testing Defined Topic 2: Hypothesis Testing using P-value Method	Slides	Pen and paper quiz, activity sheets, Recitation	Face to face both for lecture and assessment
<b>Unit 8: Inferential Statistics: Test of Difference</b> Topic 1: Overview of the commonly used inferential statistics Topic 2: Independent Sample t Test Topic 3: Paired Sample t Test Topic 4: Analysis of Variance (ANOVA)	Slides, Recorded Lecture <i>Overview of the commonly used inferential statistics</i> <a href="https://youtu.be/udjjHS4sgfU">https://youtu.be/udjjHS4sgfU</a> <i>Independent Sample t Test</i> <a href="https://youtu.be/wHILDevFets">https://youtu.be/wHILDevFets</a> <i>Paired Sample t Test</i> <a href="https://youtu.be/vT5u1Nr5c1w">https://youtu.be/vT5u1Nr5c1w</a> <i>One way ANOVA</i> <a href="https://youtu.be/bDFlrLuKLOs">https://youtu.be/bDFlrLuKLOs</a>	Pen and paper quiz, activity sheets, Recitation	Online for the recorded lecture, Face to face for assessment
<b>Unit 9: Inferential Statistics: Test of Relationship</b> Topic 1: Chi Square Topic 2: Correlation Topic 3: Linear Regression	Slides	Pen and paper quiz, activity sheets, Recitation	Face to face both for lecture and assessment
<b>Quiz (Unit 7, 8, &amp; 9)</b>			
<b>FINAL EXAM</b>			

Google drive link of all slides and handouts from Unit 1 to Unit 9:

<https://drive.google.com/drive/folders/1I9R3fJonnvVyyNtzQTZBDqTXJLDsi54Z?usp=sharing>