

MT55 D04 MATHEMATICS FOR DECISION MAKING

3 hours/week

3 credits

75marks [Int:15+Ext:60]

Text	Elementary Statistics: Picturing the World (6/e) <i>Ron Larson & Betsy Farber</i> Pearson Education, Inc (2015) ISBN: 978-0-321-91121-6
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Module I 14 hrs

Chapter1 Introduction to Statistics

- 1.1: An Overview of Statistics
- 1.2: Data Classification
- 1.3: Data Collection and Experimental Design

Chapter2 Descriptive Statistics

- 2.1: Frequency Distributions and their Graphs
- 2.2: More Graphs and Displays
- 2.3: Measures of Central Tendency
- 2.4: Measures of Variation
- 2.5: Measures of Position

Module II 12 hrs

Chapter3 Probability

- 3.1: Basic Concepts of Probability and Counting
- 3.2: Conditional Probability and the Multiplication Rule
- 3.3: The Addition Rule
- 3.4: Additional topics in probability and counting

Module III 22 hrs

Chapter4 Discrete Probability Distribution

- 4.1: Probability Distributions
- 4.2: Binomial Distributions
- 4.3: More Discrete Probability Distributions

Chapter5 Normal Probability Distribution

- 5.1: Introduction to Normal distributions and Standard Normal Distributions
- 5.2: Normal Distributions: Finding Probabilities
- 5.3: Normal Distributions: Finding Values

References:

1	Mario F. Triola: Elementary Statistics(13/e) : <i>Pearson Education, Inc(2018)</i> ISBN: 9780134462455
2	Neil A. Weiss: Elementary Statistics(8/e) <i>Pearson Education, Inc(2012)</i> ISBN: 978-0-321-69123-1
3	Nancy Pfenning: Elementary Statistics: Looking at Big Picture <i>Brooks/Cole</i> <i>Cengage Learning(2011)</i> ISBN: 978-0-495-01652-6
4	Frederick J Gravetter, Larry B. Wallnau: Statistics for the Behavioral Sciences (10/e) <i>Cengage Learning(2017)</i> ISBN: 978-1-305-50491-2
5	Seymour Lipschutz, John J. Schiller, R. Alu Srinivasan: Beginning Finite Mathematics <i>Schaum's Outline Series, McGraw-Hill(2005)</i>
6	Michael Sullivan: Finite Mathematics An Applied Approach(11/e) <i>John</i> <i>Wiley & Sons, Inc(2011)</i> ISBN: 978-0470-45827-3