**Main Objectives of the Course Specification**

*Business statistics teaches students to extract the best possible information from data in order to aid decision making, particularly in terms of sales forecasting, quality control and market research. You are also taught to determine the type of data which is needed, the way it should be collected and how it should be analyzed. After this course, you should be able to express a generally question as a statistical one, to use statistical tools for relevant calculations, and to apply graphical techniques for displaying data. The course will focus on descriptive statistics. Indeed, the main objective of Business Statistics is to describe data and make evidence based decisions using inferential statistics. This course should lead you to perform statistical analyses, interpret their results, and make inferences about the population from sample data.*

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| List of Topics | No. of  Weeks | Contact Hours |
| **Data and Variables:** Collection of Data; Sampling and Sample Designs;Classification and Tabulation of Data;Diagrammatic and Graphic Presentation; | 1 | 3 |
| **Descriptive measures:**  Central Tendency- Mean, Median, Mode, Variation, Shape, Covariance,  Mean Deviation and Standard Deviation, Coefficient of Correlation | 2 | 6 |
| **Discrete probability distributions:**  probability distribution for a discrete random variable, binomial distribution, Poisson distribution | 3 | 9 |
| **Normal distribution** | 2 | 6 |
| **Confidence interval estimation** | 1 | 3 |
| **Chi-square tests:**  Chi-square test for the difference between two proportions, Chi-square test for differences among more than two proportions, Chi-square test of independence | 2 | 6 |
| **Simple Linear Regression** | 2 | 6 |
| **Multiple Regression** | 2 | 6 |

**Recommended Textbooks:**

1. David M. Levine, Timothy C. Krehbiel, & Mark L Berenson, Business Statistics: A First Course plus MyStatLab with Pearson eText -- Access Card Package, Pearson.
2. Anderson, D. R., Sweeney, D. J., & Williams, T. A. Essentials of Modern Business Statistics with Microsoft Office Excel, South-Western: Mason, OH.
3. Berenson, ML, Levine, D, Krehbiel, TC, Watson, J, Jayne, N & Turner, LW. Business Statistics: Concepts and Applications, Pearson Education, Frenchs Forest, New South Wales.
4. Groebner, DF, Shannon, PW, Fry, PC & Smith, KD. Business Statistics: A Decision-making Approach, Prentice Hall, Harlow, England.
5. Keller, G. Statistics for Management and Economics, South-Western Cengage Learning, Belmont, California.