

Statistical Applications in Business

Course Title	Statistical Applications in Business									
Course Code	TMAT-202									
Course Type	This course serves as both Elective and Requirement, according to the program.									
	<table border="1"> <tr> <td>Hospitality Bachelor</td> <td>Requirement</td> </tr> <tr> <td>Business Diploma/ Bachelor</td> <td>Requirement</td> </tr> <tr> <td>All Programs</td> <td>General Elective</td> </tr> </table>		Hospitality Bachelor	Requirement	Business Diploma/ Bachelor	Requirement	All Programs	General Elective		
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All Programs	General Elective									
Level	Bachelor (1 st Cycle)									
Year / Semester	Year 2, B' Semester									
Teacher's Name	Mariana Pelekanos									
ECTS	6	Lectures / week	3	Laboratories / week						
Course Purpose and Objectives	This module aims to make the student aware of various statistical concepts and techniques that have bearing on business and other industrial organizations. Specifically, this module aims to analyze and present business data and other statistical information and to understand the use and the usefulness of probability.									
Learning Outcomes	<p>Upon completion of this course students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate a clear understanding of the fundamental statistical principles, techniques, formulas and applications. 2. Apply advanced statistical models and methods used in business. 3. Distinguish between discrete and continuous distributions and learn how to properly simulate them in Excel/Minitab. 4. Define basic terms in the areas of business calculus and financial mathematics. 5. Recognize, apply and interpret the results of appropriate tests applied to industrial sampling procedures and hypothesis testing. 									
Prerequisites	TMAT-102 College Algebra	Required								
Course Content	<ol style="list-style-type: none"> 1. Data and statistics 2. Descriptive statistics: tabular and graphical presentations 									

	<ul style="list-style-type: none"> • Using Excel/Minitab for tabular and graphical presentations <ol style="list-style-type: none"> 3. Descriptive statistics: numerical measures <ul style="list-style-type: none"> • Descriptive statistics using Excel/Minitab 4. Introduction to probability 5. Discrete probability distributions <ul style="list-style-type: none"> • Discrete probability distributions using Excel/Minitab 6. Continuous probability distributions <ul style="list-style-type: none"> • Continuous probability distributions using Excel/Minitab 7. Introduction to hypothesis testing 								
Teaching Methodology	The course is delivered through lectures, tutorials, exercises and computerized practice.								
Mode of delivery	Face to face.								
Bibliography	<p>Required</p> <ol style="list-style-type: none"> 1. Anderson, D., Sweeney, D. and Williams, T. Statistics for Business and Economics, 10th ed., West Publishing, 2009. <p>Recommended</p> <ol style="list-style-type: none"> 1. Lind, D., Marshal, W. and Mason, R. Statistical Techniques in Business and Economics, 11th ed., McGraw Hill, 2002. 2. Hogg, R. Probability and Statistical Inferences. 6th ed., Prentice Hall, 2001. 								
Assessment	<p>The following assessment methods are employed to assess this course:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">30 – 50 %</td> <td style="text-align: center;">Final Exam</td> </tr> <tr> <td style="text-align: center;">20 – 40 %</td> <td style="text-align: center;">Mid –Term / Tests / Quizzes</td> </tr> <tr> <td style="text-align: center;">10 – 30 %</td> <td style="text-align: center;">Assignments / Projects</td> </tr> <tr> <td style="text-align: center;">0 – 10 %</td> <td style="text-align: center;">Class Attendance & Participation</td> </tr> </table>	30 – 50 %	Final Exam	20 – 40 %	Mid –Term / Tests / Quizzes	10 – 30 %	Assignments / Projects	0 – 10 %	Class Attendance & Participation
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Language	English								