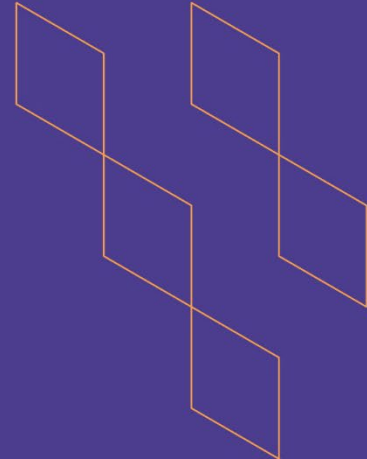




T-104  
2022

## Course Specification



Course Title: <b>Statistics for Business II</b>
Course Code: <b>STAT 311</b>
Program: <b>All Programs of the College of Business and Tourism</b>
Department: <b>General Studies</b>
College: <b>Deanship of Educational Services</b>
Institution: <b>University of Prince Mugrin (UPM)</b>
Version: <b>3</b>
Last Revision Date: <b>13/6/2023</b>



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## A. General information about the course:

Course Identification	
1. Credit hours:	3 credits
2. Course type	
a.	University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Track <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	Level 5/ Year 3
4. Course general Description	
This course provides students with the necessary tools to analyze statistical information critically. It focuses on the application of quantitative data analysis methods in authentic business cases. The course also emphasizes the use of business applications and advanced statistical tools and techniques for business problem-solving and decision-making.	
5. Pre-requirements for this course (if any):	
STAT 211	
6. Co- requirements for this course (if any):	
None	
7. Course Main Objective(s)	
In this course, the students will learn.	
<ul style="list-style-type: none"> <li>• How to test the hypothesis of one and two samples (Independent and Dependent) for the mean, proportion, and variances.</li> <li>• How to test one way and two ways ANOVA.</li> <li>• How to conduct non-parametric test like chi square test for the difference between two or more proportions and for independent.</li> <li>• How to build correlation and regression models.</li> </ul>	

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	60	100
2.	E-learning		
3.	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>		
4.	Distance learning		





## 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	7
3.	Field	
4.	Tutorial	8
5.	Others (specify)	
	Total	60



## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with ACCT / FIN program	Teaching Strategies	Assessment Methods
1.0	By the end of this course, students will be able to.....			
	Knowledge and understanding			
1.1	Define hypothesis testing and its process.	ACCT PLO K1 FIN PLO K3	<ul style="list-style-type: none"> <li>Highlight keywords.</li> <li>List</li> <li>Memory activities</li> <li>Reading materials</li> <li>Watching presentations and videos</li> </ul>	<ul style="list-style-type: none"> <li>Clicker questions</li> <li>Fill in the blanks.</li> <li>Match</li> <li>Multiple choice</li> <li>Quizzes</li> <li>True and false questions</li> </ul>
1.2	Recognize the difference between a one-way ANOVA and a two-ways ANOVA.	ACCT PLO K1 FIN PLO K3	<ul style="list-style-type: none"> <li>Highlight keywords.</li> <li>List</li> <li>Memory activities</li> <li>Reading materials</li> <li>Watching presentations and videos</li> </ul>	<ul style="list-style-type: none"> <li>Clicker questions</li> <li>Fill in the blanks.</li> <li>Match</li> <li>Multiple choice</li> <li>Quizzes</li> <li>True and false questions</li> </ul>
2.0	Skills			
2.1	Apply the p – value and the critical value methods to test the hypothesis.	ACCT PLO S3 FIN PLO S3	<ul style="list-style-type: none"> <li>Calculate</li> <li>Case studies</li> <li>Concept map</li> <li>Creating examples</li> <li>Demonstrations</li> <li>Flipped classroom.</li> <li>Gallery walk.</li> <li>Group work</li> <li>Lab experiments</li> <li>Map</li> <li>Problem-solving tasks</li> </ul>	<ul style="list-style-type: none"> <li>E-portfolio</li> <li>Lab reports</li> <li>One-minute paper</li> <li>Presentation</li> <li>Problem-solving tasks.</li> <li>Short answers</li> </ul>



Code	Course Learning Outcomes	Code of CLOs aligned with ACCT / FIN program	Teaching Strategies	Assessment Methods
2.2	Implement the Chi – Square method to test the non-parametric hypothesis.	ACCT PLO S3 FIN PLO S3	<ul style="list-style-type: none"> <li>• Calculate</li> <li>• Case studies</li> <li>• Concept map</li> <li>• Creating examples</li> <li>• Demonstrations</li> <li>• Flipped classroom.</li> <li>• Gallery walk.</li> <li>• Group work</li> <li>• Lab experiments</li> <li>• Map</li> <li>• Problem-solving tasks</li> </ul>	<ul style="list-style-type: none"> <li>• E-portfolio</li> <li>• Lab reports</li> <li>• One-minute paper</li> <li>• Presentation</li> <li>• Problem-solving tasks.</li> <li>• Short answers</li> </ul>
2.3	Calculate simple and multiple linear regressions for real life business applications.	ACCT PLO S3 FIN PLO S3	<ul style="list-style-type: none"> <li>• Compare and contrast (with charts, tables, and Venn diagrams)</li> <li>• Concept map</li> <li>• Pros and cons list</li> <li>• Mind map</li> </ul>	<ul style="list-style-type: none"> <li>• Discussions</li> <li>• Presentation</li> <li>• Provide alternative solutions.</li> <li>• Report</li> </ul>
...				
<b>3.0</b>	<b>Values, autonomy, and responsibility</b>			
3.1	Demonstrate, Teamwork Strategies in Collaborative Activities		<ul style="list-style-type: none"> <li>• Opinionated writing piece</li> <li>• Reflection exercises (reflection paper)</li> <li>• Self-report</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance</li> <li>• Neatness and carefulness (with minimal errors) of submitted work.</li> <li>• Meet deadlines.</li> <li>• Proposals of new plans</li> </ul>



Code	Course Learning Outcomes	Code of CLOs aligned with ACCT / FIN program	Teaching Strategies	Assessment Methods
				<ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Rating scale</li> <li>• Reflection piece</li> <li>• Report on extracurricular activities</li> <li>• Ungraded paper</li> </ul>

### C. Course Content

No	List of Topics	Contact Hours
1.	Fundamentals of Hypothesis Testing: One Sample Test	8 (2 Weeks)
2.	Two-Sample Tests	8 (2 Weeks)
3.	Analysis of Variance	8 (2 Weeks)
4.	Chi-Square Tests and Nonparametric Test	12 (3 Weeks)
5.	Simple Linear Regression	8 (2 Weeks)
6.	Introduction to Multiple Regression	8 (2 Weeks)
7.	Multiple Regression Model Building	8 (2 Weeks)
<b>Total</b>		<b>60 (15 Weeks)</b>

### D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Homework / Assignments	Every week	10%
2.	Class Participations	Continuous	10%
3.	Quizzes	Every 2 <sup>nd</sup> week	10%
4.	Mid Term Examination	14 <sup>th</sup> Week	25%
5.	Project	13 <sup>th</sup> Week	10%
6.	Final Examination	16 <sup>th</sup> Week	35%
...	<b>Total</b>		<b>100%</b>

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)



## E. Learning Resources and Facilities

### 1. References and Learning Resources

<b>Essential References</b>	Basic business Statistics: concepts and applications, 12th edition, by Berenson, M.L., Levine D.M., and Krehbiel T.C.
<b>Supportive References</b>	
<b>Electronic Materials</b>	PowerPoint slides for each topic along with practice sheet.
<b>Other Learning Materials</b>	<a href="https://stattrek.com">https://stattrek.com</a> , <a href="https://www.statistics.com">https://www.statistics.com</a>

### 2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture room (max 30 students)
Technology equipment (Projector, smart board, software)	Smart Board
Other equipment (Depending on the nature of the specialty)	Slides Hand out Notes

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect: Survey (electronically)
Effectiveness of student's assessment	Instructors, Head of department	Direct: exams Indirect: survey
Quality of learning resources	Instructors, Head of department	Indirect: survey
The extent to which CLOs have been achieved	Coordinator, Peer, Head of department	Direct: exams Indirect: survey
Other		

**Assessor** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)







## G. Specification Approval Data

<b>COUNCIL /COMMITTEE</b>	GS COUNCIL MEETING
<b>REFERENCE NO.</b>	AY-2022-2023-NO.4
<b>DATE</b>	12/04/2023

