

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Experimental Design
Course number	STAT4315
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Understanding the ANOVA table and the different experimental Designs
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Intended Learning Outcomes

Knowledge and Understanding	* Using the suitable design for every experiment
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Course Contents

1 - ANOVA table
2 - The Completely randomized design
3 - Block design
4 - Latin square design
5 - Multiple comparisons
6 - Factor design with two treatments
7 - Factor design with three treatments
8 - ANCOVA table
9 - Estimation and testing hypotheses

Teaching and Learning Methods

1 - Lectures
2 - Projects
3 - Homework using SPSS program

Teaching and Learning Methods for the Disabled Students

1 - Do not apply

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Midterm exam	Two hours	30
Homework	Five hours	10
Final exam	Two hours	60

Books and References

Course note	Exprimental Design	El-Imam
	Exprimental Design	Tharwat

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
Introduction & Basic concepts					
ANOVA and ACOVA tables					
ThE Completely Randomized design					
Block design					
Latin square design					
Factor design					