Course Description Form

1. Course Name:
Mathematical Statistics II

2. Course Code:
MATH414

3. Semester / Year:
Second/ Fourth

4. Description Preparation Date:

5. Available Attendance Forms:
lectures

6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours/ 4 credits

7. Course administrator's name (mention all, if more than one name)
Name: Dr. Akram Abbas Al-Sabbagh Email: akram.alsabbagh@nahrainuniv.edu.iq

8. Course Objectives

Course Objectives	• Learning the basic concepts of multivariate mathematical statistics • the definition of variable transformation and Order Statistics • Statistical Estimations

9. Teaching and Learning Strategies

Strategy	
	The strategy is to provide the students with as much information about mathematical statistics as possible by attending lectures to maximize the connection between the students and the lecturer in order to solve as many real-life statistical applications as possible. The lectures, some homework and some other additional exercises is also shared on Google Classroom.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1-5	20	Multivariate statistics	Multivariate Probability Distribution	lectures	
6-9	16	Statistical transformations	Function of Random Variable	lectures	
10-12	12	Statistical distribution for order statistics	Sampling Distribution	lectures	
12-15	12	Parameter estimation	Estimation	lecture	

11. Course Evaluation

Midterm exam: 40 marks
Final exam: 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Introduction to the Theory Statistics, Alixander Mood,
Main references (sources)	-Modern Mathematical Statistics with Applications, Jay L. Devore, Kenneth N. Berk, Springer, 2012. - Mathematical Statistics w Applications, Dennis D. Wackerly, Willi Mendenhall III, Richard L. Scheaf Thomson Brooks, 2008.
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	