### The Hashemite University Faculty of Economics and Business Administration Fall Semester 2018/19 Statistics (1802011313)



# **SYLLABUS**

Dr. Usama Robin alqalawi

Office Hours: 11:00-12:00 or by appointment Meeting Times:

Office number: 335 Eco.

(ق 231 ) at أن 1:00- 2:00 at (

Email: urmal-qalawi@hu.edu.jo

# **Required Text and Supplements**

Lind, Douglas A., William G. Marchal, and M. Wathen. *Business & Economics*. USA, McGraw-Hill/Irwin,2006 and 2012.

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# **Course Objectives:**

This course aim is to provide students majoring in economics and related sciences, with an introductory of the many applications of inferential statistics. While we focus on business applications, we also use many problems and examples that are student oriented and do not require previous courses.

# Grading

10 Points
25 Points
25 Points
40 Points
100 Points

# Learning Outcomes:

#### Knowledge outcomes

- How to apply discrete and continuous probability distributions to various business problems.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Understand the concept of p-values.
- Learn non-parametric test such as the Chi-Square test for Independence as well as Goodness of Fit.

# Skills

- Deal with the large volume of numerical information.
- Be able to reduce large amounts of information into a concise and meaningful form to enable us to make effective interpretations, judgments, and decisions.
- Use Excel software to solve some statistical problem.

# Competence

• be able to read and understand project reports and journal articles that make use of the concepts and methods that are introduced in the course

• be able to make use of statistical models in your own academic work, for example in analyses needed for your master's thesis

#### **Quizzes and Exams:**

I will NOT accept excuses for missed exams or quizzes. Arrangements of using make-up exam can be made in advance in extraordinary circumstances. No make-up quiz will be held. The final examination will be comprehensive

#### Homework:

Homework is assigned and graded. Homework problems are to be considered an integral part of the course. It is up to the students to make sure he/she knows how to solve the problems in homework set. The exams will be designed to distinguish students who work out and study the homework problems.

### **Lectures Schedule**

#### Week 1,2 and 3

- Chapter 5 Section 5.8 Rule of counting (1 lectures)
- Chapter 6 Discrete Probability Distributions (**3 lectures**)
- Chapter 7 Continuous Probability Distributions (**3 lectures**)
- Chapter 8 Sampling Methods and the Central limit Theorem (**3 lectures**)

#### Week 4 ,5,6and 8

- Chapter 9 Estimation and Confidence Intervals ( **4 lectures**)
- Chapter 10 One-Sample Tests of Hypothesis ( **4 lectures**)
- Chapter 11 Two-Sample Tests of Hypothesis ( **4 lectures**)

#### Week 9, 10 and 11

- Chapter 12 Analysis of Variance ( **4 lectures**)
- Chapter 13 Linear Regression and Correlation?( **4 lectures**)
- Chapter 14 Multiple Regression and Correlation Analysis ( 4 lectures)

#### Week 12and 13

- Chi-Square Applications? (4 lectures)
- Review

#### Week 14

#### **Classroom Rules**

1-Students must show the most respect toward each other and the instructor.

2-Come to class on time , and don't leave early unless permission has been obtained.

3- Students should not carry conversations with each other, or talk to cell phone during class lecture and discussion.

4- Students are not allowed to read non-assigned materials.

5- It's the student responsibility to inform the instructor " **a week** " prior if there is a conflict with an exam.