

# Business Statistics (QUA 207) First Term (2020/2021) (1442H)

## **Course description**

The course is designed for Business Statistics. It is basically deals with inferential statistics, which will be the focus of the course. The topics covered in the course include Central limit theorem and sampling distribution; statistical inference involving means, proportions; ANOVA; Chi-Square Tests; and simple regression.

## **Course objectives**

The main objective of this course is to provide basic knowledge about inferential statistics for the purpose of making effective business decisions.

The objectives of the course can be sated as follows:

- Construct and interpret confidence interval estimates for sample statistics.
- Compute probabilities related to sample statistics.
- Determine the sample size necessary to develop confidence interval estimate for a parameter.
- How to use hypothesis testing to test parameters.
- Compare the parameters of two populations.
- Compare the means of two and more than two populations.
- Learn when to use the chi-square test for contingency tables.
- Learn to use regression analysis and evaluate its assumptions.
- Use statistical programs (such as SPSS or Microsoft Excel)

#### Required Materials (More Information on Page: 5)

David M. Levine, Kathryn A. Szabat, David F. Stephan: **Business Statistics: A First Course, 7th Global Edition.** Pearson.

Textbook ISBN-13: 978-1-292-09593-6

**MyLab** Statistics: You are required to purchase access to MyLab Statistics, if you fail to do so you will lose up to 20% of total course credit.

Required Chapters: 7, 8, 9, 10, 11, and 12

## Study Plan (5%)

- In MyLab Statistics, each student will complete an individualized Study Plan that reflects their progress through the course material.
- Each **Section/ Chapter** of the textbook covered in class is associated with up to 4-6 Objectives, each objective is worth one Mastery Point.
- Each Objective may be practiced by using the <u>Practice button in the Study Plan</u>. You will be graded based on the number of mastery points earned and you can earn mastery points by successfully taking a Quiz Me.
- If you are having trouble with a particular question, while you are in the problem, you may want to click Help Me Solve This, View an Example, or Textbook Pages.
- If you still need help, please post a question on the Discussion Forum for the assigned Chapter. Remember, working study Plan problems is the best preparation for the exams.



#### **Homework Assignment (5%)**

- The assignments are drawn from the problems at the end of each textbook chapter and practice problems. You should correctly answer each question **prior to the posted due date**.
- Homework problems that are attempted and submitted will NOT be accepted.
- Make sure you perform well as possible on the Homework!

## **Homework Schedule (Male & Female)**

Homework	Start			E	nd (Due Dates)		
Ch7		28/01/2021			06/02/2021		
Ch8	Thursday	11/02/2021	6:00pm		20/02/2021	11:59pm	
Ch9(1)		25/02/2021			06/03/2021		
Ch9(2)		11/03/2021		Saturday			
Ch10		25/03/2021					
Ch11		08/04/2021					
Ch12		15/04/2021			23/04/2021		

## **Quizzes (10%)**

- Quizzes are given based on the timetable below "Quizzes Schedule". Students are expected to work on quizzes individually.
- These quizzes are provided as an aid for preparing for the midterm and the final exam.
- The quiz will contain 8-15 questions and you will only have 60 minutes to take the quiz.
- The instructor reserves the right to utilize whatever format (true-false, multiple choice, fill in the blank, essay/short answer) or combination of formats he\she deems necessary and in the students' best interest.
- Remember, you only have one attempt and your overall quizzes evaluation will be based on the best 3 out of 4 quizzes.

## **Quizzes Schedule (Male & Female)**

Quizzes	Day	Date	Start	End
Ch7 - 8	Sunday	21/02/2021	8:00pm	9:00pm
Ch9	Sunday	28/02/2021	8:00pm	9:00pm
Ch10	Sunday	28/03/2021	8:00pm	9:00pm
Ch11-12	Sunday	18/04/2021	8:00pm	9:00pm

#### **Exams**

- There shall be **three** examinations given during this course, **two midterms and a final examination**.
- The 1st midterm is the 8th week-and the 2nd is the 12th week of the term.
- The instructor reserves the right to utilize whatever format (true-false, multiple choice, fill in the blank, essay/short answer) or combination of formats she deems necessary and in the students' best interest.
- There is no make-up for missed Midterm exams and Final exams. Students are expected to take the exams during the week they are given.
- Remember, you only have one attempt and all midterm/final exams are closed book!

#### Male section

Exam	Day	Date	From	To	Points
First Midterm	Sunday	07/03/2021	02:00pm	03:30pm	20%
Second Midterm	Wednesday	31/03/2021	02:00pm	03:30pm	20%
Final Exam	Based on University Schedule			40%	



# **Female section**

Exam	Day	Date	From	To	Points
First Midterm	Sunday	07/03/2021	02:00pm	03:30pm	20%
Second Midterm	Wednesday	31/03/2021	02:00pm	03:30pm	20%
Final Exam	Based on University Schedule			40%	

# **Evaluation**

Assessment Task	Proportion of Assessment
Study Plan	5%
Homework Assignment	5%
Quizzes	10%
First Midterm Exam	20%
Second Midterm Exam	20%
Final Exam	40%
Total	100%

# **Attendance Policy**

- Regular and punctual attendance at all scheduled classes is expected from all students.
- Students may be denied entry to the final exam if they miss more than 25% of classes.

<sup>\*</sup>This syllabus is subject to change by the Quantitative Analysis Department only at any time. Changes, if any, will be announced in class. Students will be held responsible for all changes.



# **Course outline**

• Content of the Course and lectures Plan

	of the Course and fectures I fair		
Chapters	Contents	Weeks	_
Cl. 7	7.1 Camalina Distribution	Dates	Exams
Ch. 7	7.1 Sampling Distribution	2 Weeks	
Sampling	7.2 Sampling Distribution of the Mean	(17Jan 28Jan.)	Co
Distributions	7.3 Sampling Distribution of the Proportion.	2 <b>0J</b> an.)	Covered by First midterm exam & Final exam
Ch. 8	8.1 Confidence Interval for the Mean ( $\sigma$ Known)		ed am
Confidence	8.2 Confidence Interval for the Mean ( $\sigma$ Unknown)	31 Jan11	b3
Interval	8.3 Confidence Interval for the Proportion	Feb.)	E E
Estimation.	8.4 Determining Sample Size		irs na
Ch. 9	9.1 Fundamentals of Hypothesis-Testing Methodology		t m l e
Fundamentals of	9.2 t Test of Hypothesis for the mean ( $\sigma$ Unknown)	2 Weeks	nid Kan
Hypothesis		(14 Feb	ter n
Testing: One-		25Feb.)	Ħ
Sample Tests			
	First Midterm (20 points) 07/03/2021		
Ch. 9	9.3 One-Tail Tests	1Week	
<b>Fundamentals of</b>	9.4 Z Test of Hypothesis for the Proportion	(28 Feb	Q
Hypothesis		4March.)	0v6
Testing: One-			ex:
Sample Tests			d k am
	10.1 Comparing the Means of Two Independent	4 Weeks	Covered by Second midterm exam & Final exam
	Populations (352 omitted)	(7 March	Sec Fi
Ch. 10	10.2 Comparing the Means of Two Related Populations	1April.)	on na
Two-Sample	Paired t Test.		d :
Tests and One-	10.3 Comparing the Proportions of Two Independent		mi Kan
Way ANOVA	Populations.		dte n
viay mitovii	10.4 F Test for the Ratio of Two Variances.		m
	10.5 One-Way AN OVA. (381 to 386 omitted)		_
	Second Midterm (20 points) 04/04/2021		
Ch. 11	11.1 Chi-Square Test for the Difference Between Two	1 Week	
Chi-Square	Proportions.	(4 April-	Cov
Tests	11.2 Chi-Square Test for Differences Among More Than	8April)	
10303	Two Proportions.	•	rec
	11.3 Chi—Square Test of Independence.		ered by Final exam
Ch. 12	12.1 Types of Regression Models.	2 Weeks	y F
Simple Linear	12.1 Types of Regression Woulds.  12.2 Determining the Simple Linear Equation.	(11 April	inį
Regression	12.3 Measures of Variation.	22 April.)	al e
Kegi essiuli	12.5 Measures of Variation.  12.7 Inferences About the Slope and Correlation	F - 7	xa
	Coefficient(464 omitted)		B
	Final Exam (40 points) Based on University Schedule		



# **Required Materials**

• Title: Business Statistics: A First Course, 7th Global Edition, Pearson

• Authors: Levine, Szabat, and Stephan

• Textbook ISBN-13: 978-1-292-09593-6

- Required Chapters: 7, 8, 9, 10, 11, and 12

## **MyLab Statistics**

• In order to be able to work on the Study Plan, Homework, Quiz; the student **MUST** purchase MyLab Statistics Access Code (**which will INCULDE the eTextbook**), if you fail to do so you will lose up to 20% of total course credit.

• MyLab Statistics is a platform that is connected to the student's LMS to enrichen the learning experience. It provides the student with access to the eTextbook, Example, and other multimedia material.

# **Learning Management System Support (Blackboard Support)**

• Webpage: https://daleel.ksu.edu.sa/ar

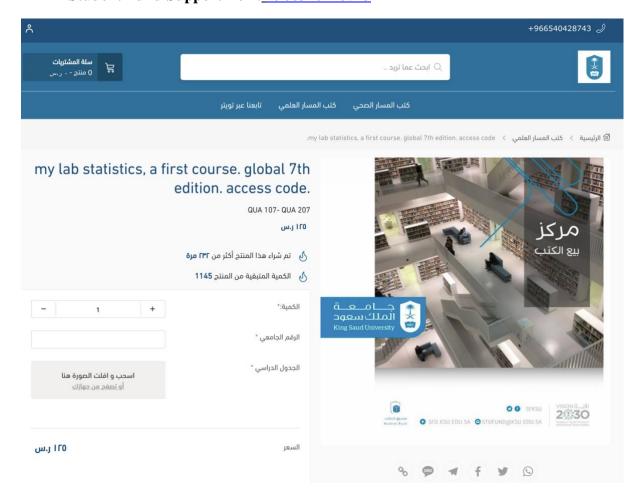
Tel#: 00966 11 4677297
Tel#: 00966 11 4675557
Email: itsupport@ksu.edu.sa





# How to purchase the Book\ eBook\ MyLab Statistics Code

- **Student Fund Market** webpage <u>direct link</u>: <u>https://salla.sa/student\_fund/my-lab-statistics-a-first-course-global-7th-edition/p2130282455</u>
- Student Fund Market webpage: <a href="https://salla.sa/student\_fund">https://salla.sa/student\_fund</a>
- Student Fund Support Tel#: <u>+966540428743</u>

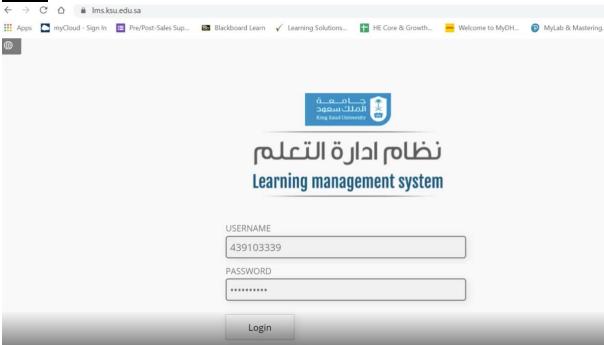




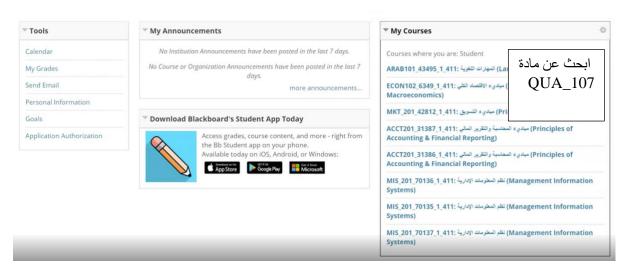
# **Activate your MyLab Statistics Code**

In order to activate Code, You have to connect through your LMS.KSU.EDU.SA page and Select your section QUA\_107, following these steps:

# **Step 1:**



# **Step 2:**

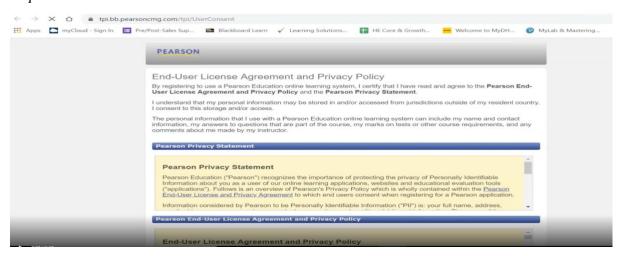




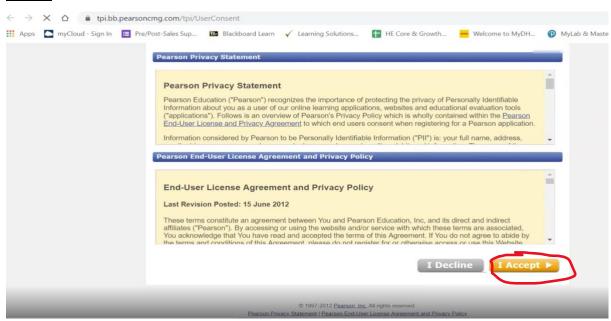
## Step 3:



## Step 4:

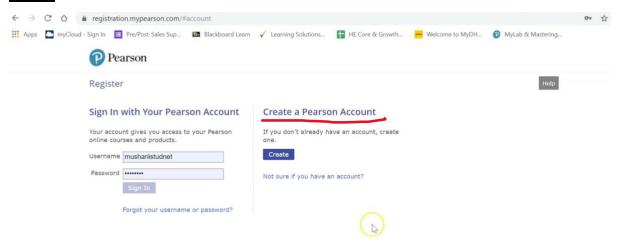


## **Step 5:**





## **Step 6:**

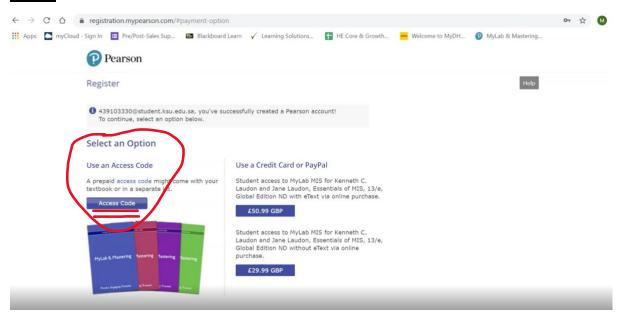


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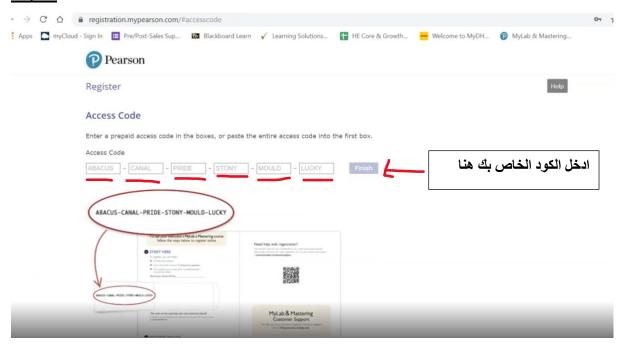
Use your KSU Student Email. Any other Emails will NOT be accepted; such as: Gmail, Yahoo, ... etc.  $\leftarrow$   $\rightarrow$   ${\tt C}$   ${\tt \hat{a}}$  registration.mypearson.com/#create-account 🔛 Apps 🔼 myCloud - Sign In 🗏 Pre/Post-Sales Sup... 🔞 Blackboard Learn 🗸 Learning Solutions... 📳 HE Core & Growth... 📙 Welcome to MyDH... 🔞 MyLab & Mastering... Pearson KSU EMAIL ONLY Register Create an Account Your account gives you access to Pearson product . Sign in if you already have an account. Email Address 439103330@student.ksu.edu.sa Username 439103330@student.ksu.edu.sa Password ..... ~ Re-enter Password ...... First Name Nawaf Last Name Alshmmari ~ Security Question What is my account security hint? Security Answer ksu ■ I agree to the Terms of Use and acknowledge the Privacy Policy.  $\hfill \Box$  I want to help improve Pearson products and learn about new offers



# **Step 8:**

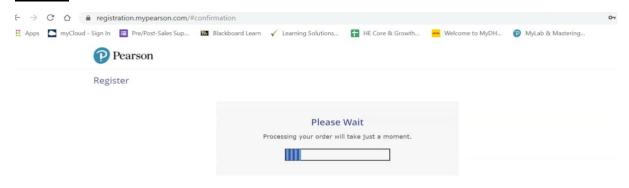


# **Step 9:**

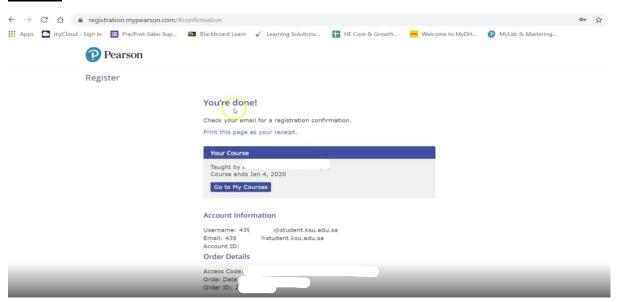




# **Step 10:**



# **Step 11:**



# **Step 12:**





# **Step 13:**



# **Practice Exercises Information**

