

## Introduction to Business Statistics (QUA 107) Fall Term (2019/2020)

### Course description

The course is designed for the purpose of providing an introduction to Business Statistics. This course basically deals with descriptive statistics, which will be the focus of the course with an abbreviated introduction to inferential statistics. The topics covered in the course include classifying, analyzing, and presenting numerical data; frequency distribution, averages, dispersion, basic probability, probability distributions, and Sampling Distributions.

### Course objectives

The main purpose of this course is to provide basic knowledge about collecting, organizing, summarizing, describing, and presenting data to provide information, which are stated in numerical form, for the purpose of making effective business decisions.

The objectives of the course can be stated as follows:

- To provide the student with the basic concepts and terminology of statistical science, including graphical representation and descriptive measures.
- To cover different methods of arranging & tabulating and presenting data.
- To provide the student the basic concepts of probability theory.
- To understand the concept and importance of relationships between variables and to fit mathematical models.
- To understand and use Excel software for data analysis and decision making.
- To prepare the student to perform scientific interpretation of economic and social phenomena to assist various policy and decision makers.

### Required Materials:

David M. Levine, Kathryn A. Szabat, David F. Stephan: **Business Statistics: A First Course, 7<sup>th</sup> 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: 1, 2, 3, 4, 5, 6, and 7**

### How to Access and Login to My Statistics Lab:

1. Go to [www.pearson.com/mylab](http://www.pearson.com/mylab) .
2. Under Register, select **Student** .
3. Confirm you have the information needed, then select **OK! Register now** .
4. Enter your instructor's course ID: **xxxxXXX**, and **Continue** .
5. Enter your existing Pearson account **username** and **password** to **Sign In** .  
» If you don't have an account, select **Create** and complete the required fields. **Remember to Use your KSU email ID when registering.**
6. Select an access option.  
» Enter the access code that came with your textbook or that you purchased separately from the bookstore.

**You Can Also Buy the code from University Bookstore at a discounted price!**  
**You can also get a temporary access for two weeks.**

**If you, for financial reasons, can't buy the book, please see the chairman of Quantitative Analysis Department for more help.**

الطلاب اللذين لديهم مشاكل مادية وليس بإمكانهم دفع قيمة الكتاب عليهم مراجعة رئيس او وكيله قسم التحليل الكمي للمساعدة.

7. From the You're Done! page, select **Go To My Courses** .
8. On the My Courses page, select the course name **Stat200** to start your work.

**To upgrade temporary access to full access:**

1. Go to [www.pearson.com/mylab](http://www.pearson.com/mylab) .
2. Select Sign In .
3. Enter your Pearson account username and password, and Sign In .
4. Select Upgrade access for **Stat200** .
5. Enter an access code purchased from the University Bookstore or buy access with a credit card or PayPal.

**Study Plan :**

In MyLab *Statistics*, each student will complete an individualized Study Plan that reflects their progress through the course material. Each section of the textbook covered in class is associated with up to six (usually four) Objectives, each worth one Mastery Point. Each Objective may be practiced by using the Practice button in the Study Plan. 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:**

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 beyond the due date will receive a 40% reduction in credit. Make sure you perform well as possible on the Homework.

**Homework Schedule (Male & Female)**

Homework	Start			End		
HW Ch1	Thursday	12/09/2019	6:00pm	Saturday	14/09/2019	12:00pm
HW Ch2		19/9/2019			21/09/2019	
HW Ch3		3/10/2019			5/10/2019	
HW Ch4		24/10/2019			26/10/2019	
HW Ch5		31/10/2019			2/11/2019	
HW Ch6		28/11/2019			31/11/2019	
HW Ch7		5/12/2019			7/12/2019	

**Quizzes:**

Quizzes are not proctored and are given online every 2 weeks. These quizzes are provided as an aid for preparing for the midterm and the final exam. The practice 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 she deems necessary and in the students' best interest. Remember, you only have one attempt and your overall quizzes evaluation we be based on the best 3 out of 4 quizzes.

**Quizzes Schedule (Male & Female)**

Quiz	Day	Date	Start	End
Quiz Ch2	Friday	20/09/2019	5:00pm	6:00pm
Quiz Ch1-3	Friday	11/10/2019	5:00pm	6:00pm
Quiz Ch4	Friday	25/10/2019	5:00pm	6:00pm
Quiz Ch4-5	Friday	15/11/2019	5:00pm	6:00pm

**Exams:**

There shall be three examinations given during this course, two midterms and a final examination. The 1<sup>st</sup> midterm is the 7<sup>th</sup> week–and the 2<sup>nd</sup> is the 11<sup>th</sup> 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	Saturday	12/10/2019	04:00pm	05:30pm	20
Second Midterm	Saturday	16/11/2019	04:00pm	05:30pm	20

**Female section**

Exam	Day	Date	From	To	Points
First Midterm	Tuesday	15/10/2019	12:00am	01:30pm	20
Second Midterm	Tuesday	19/11/2019	12:00am	01:30pm	20

**Course outline**

• **Content of the Course and lectures Plan**

Lectures	Content	Assignments			
		SP	HW	Quiz	Exam
2	<b>Getting Started</b>	1	1	None included	
2	<b>Ch1: Defining and Collecting Data</b> <ul style="list-style-type: none"> <li>Defining Variables</li> <li>Collecting Data</li> <li>Types of sampling methods</li> <li>Types of survey errors</li> </ul>	1	1	1	<b>First midterm exam &amp; Final exam</b>
6	<b>Ch2: Organizing and Visualizing Variables</b> <ul style="list-style-type: none"> <li>Organizing Categorical Variables</li> <li>Organizing Numerical Variables.</li> <li>Visualizing Categorical Variables.</li> <li>Visualizing Numerical Variables.</li> </ul>	1	1	1	
6	<b>Ch3: Numerical Descriptive Measures</b> <ul style="list-style-type: none"> <li>Measures of central tendency</li> <li>Variation and Shape</li> <li>Exploring Numerical Data</li> <li>Numerical Descriptive Measures for population</li> </ul>	1	1	1	

<b>First Midterm (20 points) 12/10/2019</b>					
6	<b>Ch4: Basic Probability</b> <ul style="list-style-type: none"> <li>• Basic probability concepts</li> <li>• Conditional Probability</li> <li>• Multiplication Rule</li> </ul>	1	1	1	Second midterm exam & Final exam
6	<b>Ch5: Discrete Probability Distributions</b> <ul style="list-style-type: none"> <li>• Expected value and Variance, Standard Deviation of Discrete variable.</li> <li>• Binomial Distribution</li> <li>• Poisson Distribution</li> </ul>	1	1	1	
<b>Second Midterm (20 points) 16/11/2019</b>					
6	<b>Ch6: Continuous Probability Distributions</b> <ul style="list-style-type: none"> <li>• The Normal Distribution.</li> <li>• Evaluating Normality</li> </ul>	1	1	1	Final exam
2	<b>Ch7: Sampling Distributions</b> <ul style="list-style-type: none"> <li>• Sampling distribution of the mean</li> <li>• Sampling distribution of the proportion -</li> </ul>	1	1	1	

#### **EVALUATION**

Midterm Exams	40%
Quizzes	5%
HW Assignment	5%
Study Plan	10%
Final exam	40%
<b>Total</b>	<b>100%</b>

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.

\*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.