Math 10.22 Meets Monday and Wednesday from 1:30 pm – 3:45 pm in MQ-3
CRN 02440

Instructor: Kent Shi
Office Hour: Mon & Wed 3:45 – 4:15 pm @ MQ-3
E-mail: shikent@fhda.edu
Website: Course Studio (accessible from MyPortal)

Prerequisite: Math 114 (Intermediate Algebra) or the equivalent or satisfactory score on the math placement exam.

Required Text: Introductory Statistics by Illowsky and Dean
You may download an electronic version of this book for free at
https://openstaxcollege.org/textbooks/introductory-statistics/get

Math 10 Course Description: Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, social sciences, psychology, the sciences, and those pertaining to issues of contemporary interest. The use of technology (computers or graphing calculators) will be required in certain applications. Where appropriate, the contributions to the development of statistics by men and women from diverse cultures will be introduced

Student Learning Outcomes:
After successfully completing Math 10, the student will be able to
1.   Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.
2.   Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
3.   Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

Calculator: A scientific calculator is sufficient for this course. Graphing calculators like TI-83 and TI-84 are recommended but not required. I may give demos at times on how to use graphing calculator to solve problems, but all exam and homework problems can be solved without a graphing calculator. Note: If you choose solve problems via a graphing calculator, you are still required to setup the problem on paper or no credit will be given. On exams, I also recommend that you show some amount of intermediate work (as if the problem was done by hand), so I can give you partial credits in case you didn't produce the correct final result.

Attendance: Statistics is a very demanding subject. As a result, regular attendance is extremely important. However, I realize that, on rare occasions, unforeseen circumstances may arise that will prevent you from attending class or will force you to be late to class. I will not penalize you for occasional absences or occasional tardiness. Yet, I reserve the right to drop any student who is consistently absent or makes a habit of being late to class on a regular basis. If you miss class for any reason, it is your responsibility to obtain the notes and/or any handouts you may have missed.

Grading:

1.	Homework	10%
2.	Pop Quizzes	5%
3.	Midterm Exams (2)	40%
4.	Computer Labs	10%
5.	Final Exam	35%

1.   Homework

Homework problems are assigned from the textbook. You must turn in the homework during the first 5 minutes of class on its due date, <u>late homework will not be accepted.</u> You must <u>show work</u> where appropriate in order to earn credit for each problem. Your lowest homework score will be dropped.

2.   Pop Quizzes

There will be 5-7 pop quizzes during the quarter. Quizzes will be based on homework assignments and lectures, and you will be allowed to use your textbook (paper version only) and notes during the quiz. The intention of the quizzes is to make sure that you are keeping up with the class, and for me to get a sense of where the class stands before the exams. You cannot makeup missed quizzes, but I will drop your lowest quiz score.

3.   Midterms

There will be two midterm exams (see calendar). You may bring in one side of one 8 1/2" × 11" notes for each exam. You must take the exam at the scheduled time unless: 1. you need to participate in a school sponsored event, or 2. unforeseen emergencies. For both scenarios, you must provide <u>written proof</u> (e.g. doctor's note) for your absence. If accepted, I will replace your midterm score with what you earn on the final (e.g. the final exam will be worth 55% if you miss one midterm), otherwise you will receive a zero for the missed midterm.

4.   Computer Labs

The use of computers to analyze and interpret data is an essential part of learning statistics. We will have 3-5 computer labs during quarter where you will need to solve problems or analyze data by using computers. You must also turn in the lab during the first 5 minutes of class on its due date, and <u>late labs will not be accepted.</u>

6.   Final Exam

The final exam will be comprehensive and will take place on:
          1:45 – 3:45 pm on December 9 (Wednesday)

You may bring in one 8 1/2" × 11" sheet of paper with notes to the final exam. You may write on both side of this paper. No photocopying allowed. You may, however, word-

process your notes if you wish. You are also required to bring government issued photo identification to the final exam.

How your Final Grade is Computed:

COURSE GRADE	PERCENTAGE
A	92% - 100%
A-	90% - 91%
B+	88% - 89%
B	82% - 87%
B-	80% - 81%
C+	78% - 79%
C	70% - 77%
D	60% - 69%
F	0% - 59%

Note: You are guaranteed a grade no worse than the above scale. This way you have a score to strive for depending on your desired grade in the class. However, minimum percentages might be less than those given above when your final grade is determined.

Adding/Dropping: Students will not be automatically dropped for nonattendance. However, I do reserve the right to drop students for nonattendance. Keep in mind that it is the student's responsibility to officially withdraw from the course. DO NOT assume that I will drop you if you stop coming to class. Consequently, I suggest you pay strict attention to the drop dates listed in your MyPortal account.

Class Conduct: Cheating is absolutely forbidden in my class. Looking at someone else's exam/quiz, helping another student during an exam/quiz, talking to anyone else except me during an exam/quiz, copying another student's work, or using an external source of information for which you were not explicitly given permission, will result in a score of 0 on the exam/quiz/homework/lab. Cheating incidents will be reported to the Dean of Student Affairs. If you do not understand what the word "cheating" means, please consult the school brochure on **academic honesty**.

Also, I expect you to be respectful of your fellow students and of me. To that end, come to class on time, do not leave early unless you have that approved by me in advance, do not talk during class, do not be disruptive and pay attention during class.

Cell Phones: I realize that many of you feel the need to stay connected at all times. If you feel that you cannot turn off your cell phone during class, place your cell phone on vibrate or silent mode. If you receive a call, quietly step outside the classroom before answering the phone.

Sources of Help: One of the main reasons students have trouble with this course is their reluctance to obtain help when they need it. There are many sources of help for everyone. I am your first source; I am willing to do whatever I can to help you with all aspects of your education, especially this course. If cannot make it to my office hour, we can schedule appointments via Skype, Google Hangout at times that are convenient to you. Tutorial help is also available in Math, Science & Technology Resource Center (Room S43) which is regularly staffed with Faculty members and trained instructional associates who are there to help you.

Students with Disabilities:

To obtain disability-related accommodations, students must contact Disability Resource Center (DRC) as early as possible in the quarter. If you already have an accommodation notification from DRC, please contact me privately to discuss your needs.

MATH 10   STATISTICS TENTATIVE CALENDAR   FALL 2015

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
September 21 **Syllabus** Chapter 1	22	23 2.1, 2.2, 2.3	24	25
28 2.4, 2.5	29	30 2.6, 2.7	**October** 1	2
5 Chapter 12	6	7 3.1, 3.2	8	9
12 3.3, 3.4	13	14 Chapter 4	15	16
19 Chapter 5	20	21 **Midterm 1** **(Ch 1 – 4, 12)**	22	23
26 Chapter 6	27	28 Chapter 7	29	30
November 2 Chapter 8	3	4 9.1, 9.2	5	6
9 **HOLIDAY**	10	11 **EXAM 2** **(Ch 5 – 8)**	12	13
16 9.3, 9.4, 9.5	17	18 10.1, 10.2	19	20
23 10.3, 10.4	24	25 11.1, 11.2	27 **HOLIDAY**	28 **HOLIDAY**
30 11.3, 11.4, 11.5	**December** 1	2 Chapter 13	3	4
7	8	9 **FINAL EXAM**	10	11