Western Kentucky University

Mathematics Department

Syllabus for Math 183-C01- Introductory Statistics,

3 credit hours. 07/06-08/05, 2021

MTWRF, 10:30 am - 12:10 pm, COHH 3121

Instructor Information:

Instructor: Dr. Lukun Zheng Office: COHH 4107 Telephone: 980-253-0563

e-mail: lukun.zheng@wku.edu (preferable)

Office hours: TR 09:30 am-10:15 am or by appointment

Texts and References:

Zheng (2020) Introductory Statistics, 1st edition (ISBN: 978-1-7924-2985-9), Kendall Hunt Publishing. You can order this book directly from the publisher's website using the following link: he.kendallhunt.com/zheng. This is the more affordable approach. You may also purchase it from the campus bookstore. However, it may cost more.

Course Description:

Introductory Statistics (3 hours) meets five learning objectives as part of the general education requirement for quantitative reasoning. MATH 183 students will learn to interpret, illustrate, and communicate mathematical and statistical ideas. Further, students will learn to model and solve problems. As part of this course students will learn concepts from introduction to elementary probability theory; the analysis of data by means of frequency distributions and the statistics which describe them; the binomial and normal probability distributions; statistical inference; and emphasis is on applied real world problems. This course is not accepted for credit toward the mathematics major or minor.

MATH 183 specifically meets the five learning objectives as detailed below:

- Interpret information presented in mathematical and/or statistical forms.
- Illustrate and communicate mathematical and/or statistical information symbolically, visually and/or numerically.
- Determine when computations are needed and execute the appropriate computations.
- Apply an appropriate model to the problem to be solved.
- Make inferences, evaluate assumptions, and assess limitations in estimation modeling and/or statistical analysis.

Major Teaching Methods:

We will spend much of our class time on conceptual understanding, examples, and so on. Our examples will be close to the homework problems and even test problems. I highly recommend that we take notes in class.

Special Instructional Platform:

We will be using Blackboard® for the course homepage. We will put all important information in blackboard including announcements, lecture notes, lecture videos, quizzes, your grades, etc. We will use calculator (online calculator, TI83, or TI84) in our class. We will give instructions on how to use calculators to solve related statistical problems.

Grading and Evaluation Procedures:

Evaluation:

Quizzes 30 % Exam 1 20 % Exam 2 20 % Final 30 %

Grade Scale:

A 90 - 100 B 80 - 89 C 70 - 79 D 60 - 69 F 59 or below

University Plagiarism Policy:

When you use (for example, quote or even summarize or paraphrase) someone else's media, words, data, ideas, or other works, you must cite your source. You should be especially careful to avoid plagiarizing Internet sources (for example, e-mail, chat rooms, Web sites, or discussion groups). It does not matter whether you borrow material from print sources, from the Internet, from on-line data bases, or from interviews. Failure to cite your source is plagiarism. Students who plagiarize may receive an "F" or a "0" for the assignment, or an "F" for the course.

Academic Dishonesty:

"Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the coursework in which the act is detected or a failing grade in the course without possibility of withdrawal." Although students may help each other on homework assignments, individual work is required on quizzes and exams.

Attendance Policy:

Attendance will be recorded almost every day, and regular attendance is expected. The WKU University Attendance Policy (web version at https://www.wku.edu/undergraduatecatalog/) states the following in regard to attendance: "Excessive absenteeism may result in the instructor's dismissing the student from the class and recording a failing grade, unless the student officially withdraws from the class before the withdrawal deadline." For this class, absence from **more than 3 classes** will be considered excessive. The instructor will note students who arrive excessively late or leave excessively early; such instances will be counted as an absence.

Should absences occur, the student will be responsible for bringing in a valid excuse. This note can't be from a parent or roommate. It must be from a legitimate source on letterhead with the date, your name, and reason for absence listed in the contents. Receipts from doctor appointments, dentist appointments, towing service, speeding ticket, etc. will be accepted.

Additional Information:

Course demand: at least 8 hours per week. Time will vary by student.

Homework: Homework problems will be posted in blackboard. These will not be turned in for a grade. It is the student's choice/responsibility to work these problems to strengthen his/her/their understanding of the material. Solutions to these problems will also be posted. However, it is recommended that the student attempt the problems on his/her/their own prior to consulting the posted solutions. "Understanding" the solution and being able to solve a problem on one's own are not equivalent. We will go through the homework problems in class.

Quiz: Quizzes will be given in the classroom. The date will be announced ahead of time and the quizzes are usually at the end of the class sessions. The problems in the quiz can be multiple choice questions or open questions. You will have an opportunity to take a make-up quiz only

when yours is a legitimate emergence with written proofs and only if you can take the make-up quiz within quiz date. If you can't take the make-up quiz within the quiz date and yours is a legitimate emergence with written proofs, your average grade on all other quizzes will be used for your grade on the missed quiz.

Quiz Policies:

- Use of disallowed materials (including any form of communication with classmates or looking at a classmate's work) during quizzes will not be tolerated. This will result in a 0 on the quiz for all involved and possible failure of the course.
- The scores on the quizzes may be different from each other. For instance, quiz 1 may have a total score of 21, quiz 2 may have a total score of 13, etc.
- Your total score on all the quizzes will be added up and the percentage of your total out
 of the maximum possible total scores on all the quizzes will be used as your grade on the
 quizzes.

Exams: Material for the exams will be based on the readings in textbook, homework, Quiz problems, and in-class activities.

Dates:

Exam 1: Tuesday, 07/16/2021 Exam 2: Tuesday, 07/26/2021 Final Exam: Friday, 08/05/2021.

Exam Policies:

- Use of disallowed materials (including any form of communication with classmates) during exams will not be tolerated. This will result in a 0 on the exam for all involved and possible failure of the course.
- The exams during the semester will consist of the materials covered since the previous exam. However, the final exam will be comprehensive. You will have an opportunity to take a make-up exam only for the in-class exams if you can take the make-up exam within the test date <u>only when yours is a legitimate emergence with written proofs</u>. If you can't take the make-up exam within the exam date and yours is a legitimate emergence with written proofs, your grade on the final exam will be used for your grade on the missed exam.

Title IX Misconduct/Assault Statement

WKU is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070)

at $\frac{https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf}{muture of the properties of the$

at https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf.

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

Student Accessibility Resource Center

In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the student accessibility resource center in DSU 1074. Please DO NOT request accommodations directly from the instructor without a letter of accommodation from the Student Accessibility Resource Center.

General Statement

This class will contain material that builds on previous material covered, so DO NOT FALL BEHIND! If you miss a class, get the notes immediately. Understanding problems that I work in class and being able to work problems on your own are two completely different things. If you do not do the homework, you will find the exams very difficult. If you are having trouble with a topic covered, come see me as soon as problems arise (i.e., not the day before the exam). Office hours are for you, so do not hesitate to come see me (or make an appointment).

Remark:

Instructor reserves the rights to make changes during the semester if it is needed.