Instructor: Ian Mouzon (imouzon@iastate.edu, Snedecor Hall 3220, 1-515-294-7891)

TA: Qianqian Shan (qshan@iastate.edu, Snedecor Hall 2406)

Office Hours: TR 9:30-10:30 AM, W 9:00 - 10:00 AM in Snedecor Hall 3220.

**TA Office Hours:** TBD

Web: Blackboard (https://bb.its.iastate.edu/), Additional (https://imouzon.github.io/stat105)

**Textbook:** Basic Engineering Data Collection and Analysis (ISBN 0-534-36957-X) by S. B. Vardeman and J. M. Jobe, published in 2001 by Duxbury/Thomson Learning.

**Learning Outcome:** By the end of this course, students should learn basic concepts of statistics and probability to solve problems arising in engineering applications.

Grade Policy: Grades (include plus/minus) will be determined based on the following:

**Homework:** Weekly assignments will be collected on Thursdays. No late homework will be accepted. Homeworks will be collected at the beginning of Thursdays class. Lowest of 10 scheduled HWs will be dropped.

**Exams:** There will be two semester exams and a comprehensive final. The semester exams will be given during the lecture period and will be closed book. The final exam is comprehensive and is scheduled for Tuesday, 12/15 from 7:30 - 9:30 AM.

The components have the following weights:

Exam 1	
Exam 2	
Homework:	$\dots 20\%$ (assigned weekly)
Final Exam:	30% (12/15, TBD)

**Letter Ranges:** Guarantees of minimum grades in the course are as follows: 95 or above = A, 90 - 95 = A-, 87 - 90 = B+, 83 - 87 = B, 80-83 = B-, 77 - 80 = C+, 73 - 77 = C, 70 - 73 = C-, 67 - 70 = D+, 63 - 67 = D, 60 - 63 = D-, . . .

I try to make sure that students who would like to attend office hours have that ability. If none of these times fit your course schedule, additional office hours can be arranged. You can also ask questions through emails at any time - I check my email frequently and emails will generally be answered within 24 hours (except on weekends). However, I may not respond immediately so it is in your best interest not to wait until the last minute before homework deadlines or exams.

## Course Outline:

Introduction, Data Collection (Ch.1, 2)	HW1 assigned
Descriptive Statistics (sec. 3.1 3.2)	. HW1 due, HW2 assigned
Descriptive Statistics, Line Fitting (Ch. 3.3, 4.1, 4.2)	HW2 due, HW3 assigned
Curve and Surface Fitting (sec. 4.2)	HW3 due, HW4 assigned
Random Variables (sec. 5.1)	. HW4 due, HW5 assigned $$
Random Variables (sec. 5.1) <b>E</b>	<b>Exam 1</b> , covering Ch. 1 - 4
Random Variables (sec. 5.2)	. HW5 due, HW6 assigned $$
Random Variables (sec. 5.2)	. HW6 due, HW7 assigned
Random Variables (sec. 5.4, 5.5)	No homework assigned
Random Variables, Simple Inference (sec. 5.5, 6.1)	. HW7 due, HW8 assigned
Simple Inference (6.1)	Exam 2, covering Ch. 5
Simple Inference (6.2, 6.3)	. HW8 due, HW9 assigned
Simple Inference (6.3, 6.6)	No homework assigned
Thanksgiving break	No homework assigned
One Way Model CI's for Linear Functions of Means (7.1, 7.2) HW9 due, HW10 assigned	
One Way ANOVA, Control Charts, Review (7.4, 7.5)	HW10 due
Final Exam	location to be announced.

## **Important Dates:**

Drop Deadline	October 30th
Thanksgiving break	$\dots$ November 23rd - 27th
First Test	October 1st
Second Test	November 5th
Course Final	December 15th

**Attendance**: Grades do not directly depend on attendance - still, experience shows that attendance and course performance are significantly related to each other. In order to get the most out of this course and do his or her personal best, it is necessary for a student to treat attendance as if it were mandatory.

Academic Honesty: As an Iowa State University student, you have agreed to abide by the University's academic honesty policy (http://www.dso.iastate.edu/ja/academic/misconduct.html). Academic misconduct is a serious matter and student's suspected of academic dishonesty will be reported to the Dean of Students Office. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

**Extra Help**: Do not hesitate to come to my office during office hours or schedule an appointment to discuss a homework problem or any aspect of the course. If you want to hire an outsider tutor (i.e., for a fee), you can find a list of such people through the stat department.

**Disability Accommodation**: Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact your instructor (in this case, Ian Mouzon) to set

up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with the instructor, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu. Retroactive requests for accommodations will not be honored.

**Dead Week**: This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook http://www.provost.iastate.edu/resources/faculty-handbook .

Harassment and Discrimination: Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or the Office of Equal Opportunity and Compliance at 515-294-7612.

Religious Accommodation: If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the Dean of Students Office or the Office of Equal Opportunity and Compliance.

Contact Information: If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.