## Syllabus: STATISTICS 351

Probability and Statistics for Engineering

Section 007

Fall 2019

Instructor: P.K. Pathak, C402 Wells Hall, 353 - 8900, pathakp@stt.msu.edu

Lecture: MWTh 5:20p – 6:10p, 1279 Anthony Hall (ANH)

Office Hours: MW 12:30p – 2:00p (C402 WH) and by appoinment

Email: pathakp@stt.msu.edu

Teaching Assistant		STT 351		
Name	E-mail	Phone	Office	Office hours
TBA	TBA_@stt.msu.edu	TBA	TBA WH	TBA

Help Resources: Should you need assistance with your course work, be advised that there are multiple sources of assistance and counsel available, including Help Room instructors, teaching assistant and the lecture instructor. You should feel free to get in touch with them as needed. Nonetheless, keep in mind that it is often most efficient to first contact the teaching assistant, who has been assigned to assist Dr. Pathak with the course. In addition Statistics Help Room A102 Wells Hall is staffed for certain hours of the week with teaching assistants to give walk-in help. See Help Room schedule posted on: https://stt.natsci.msu.edu/academics/

Websites: http://msu.lon-capa.org.and.https://stt.natsci.msu.edu/academics/class-pages will provide course information. If required, log in with your MSU login name and password.

Prerequisite: MTH 234 or MTH 254H or LBS 220 or approval of the college (Not open to STT 430).

Text: Probability and Statistics for Engineering and the Sciences, by J. Devore ISBN 978-1-305-74892-7

Custom 8th edition, Cengage Learnig, 2015

Course Description: This course provides a basic introduction to probability and statistics for engineering students. The student will learn the theory of statistical decision making and its applications to statistical problems commonly encountered in engineering. Topics covered will include probability models, random variables, estimation, confidence intervals, testing of hypotheses and simple linear regression. The course will cover selected materials from Chapters 1–8 and 12 from the text.

## Homework and Examinations:

Homework will be assigned online using LON-CAPA. There will be six homework assignments during the term. Each home work will open on a specified date and time and will also automatically close at a preassigned day and time. PLEASE DO NOT WAIT TILL THE LAST DAY TO WORK ON THE HOMEWORK PROBLEMS. THE LOWEST HOMEWORK WILL BE DROPPED. LATE HOMEWORK WILL NOT BE ACCEPTED.

There will be two midterm exams and one comprehensive final exam. Here is their schedule:

- Exam 1 (50 points): Monday, October 7
- Exam 2 (50 points): Monday, November 18
- Final Exam (100 points): Monday, Dec. 9, 8:00p 10:00p

Classwork: Classwork will be assigned during lecture hours, consisting of two parts "question of the day (QOD)" and "exercise of the day (XOD)". QODs close at the end of the lecture period while XODs, by 10:00 pm the day they are assigned. Two QODs and two XODs with lowest scores will be dropped. PLEASE DO NOT WAIT TILL THE LAST MINUTE TO WORK ON THESE PROBLEMS. THERE WILL IN GENERAL BE NO EXTENSION.

Attendance: You are expected to attend all meetings of the class. If you must miss a class, plan to get notes for that day from a classmate.

Note: All exams including a comprehensive final exam are are "closed book" and "closed notes". The exams will contain questions concerning text material and problems, classroom example and discussions. Further information on these matters, if necessary, will be announced in class and posted on the class website. Missing an exam without a valid excuse presented to the instructor will result in a score of 0 points. Persons who must miss an exam because of medical or family emergency or other exceptional circumstances should present a valid excuse to Dr. Pathak, in advance of the examination whenever possible. All students are expected to adhere to the University's policy concerning academic integrity. It is covered in the Spartan Life booklet under

General Student Regulations. For more information about this, please consult the handbook or visit the Spartan Life website at http://www.vps.msu.edu/SpLife/

Evaluation: Points are earned through five best out of six homeworks (50 points), two midterm examinations (100 points), a comprhensive final examination (100 points), and class work (50 points).

Points Toward Grade				
Source	Points			
Homework (5 Best)	50			
Two Midterm Exams	100			
Class Work	50			
Final Exam	100			
Total	300			

Your total number of points will be converted into a percentage and your grade will be determined by the following grading scale:

90 - 100%: 4.0	85 - 89%: 3.5	79 - 84%: 3.0	73 - 78%: 2.5
65 - 72%: 2.0	60 - 64%: 1.5	55 - 59%: 1.0	0-54%: 0

Important Dates: In addition to the exam dates, you should be aware of all the University mandated dates related to courses. These are currently available at:

http://www.reg.msu.edu/ROInfo/Calendar/Academic.aspx

Here are a few of the more important dates:

- Wednesday, 8/28: Classes begin, late enrollment fee begins.
- Monday, 9/02: Labor Day Holiday, University Closed.
- Monday, 9/23 (8:00 pm): End of Tuition Refund Period.
- Wednesday, 10/16: Mid-semester, last day to drop with no grade reported.
- 11/28-29: Thu-Fri, University Closed.
- Friday, 12/06: Classes end
- Monday, Dec. 9, 8:00 pm 10:00 pm: Final Exam, Location TBA.

## ADA:

To arrange for accommodation, a student with special need should contact the Resource Center for Persons with Disabilities.

Phone:353-9642, Website: http://www.rcpd.msu.edu.

## Disclaimer:

The instructor reserves the right to make any changes he considers academically advisable. Changes will be announced in class and posted on the class website. It is your responsibility to keep up with any changed policies.