

STT 201, section 730, Spring 2021 Syllabus

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Teaching Assistant: Haywood, Jacob, personal phone and zoom (5174810925, <https://msu.zoom.us/j/9209643193>)

E-mail: There are two e-mail addresses to be used for different purposes in the course:

- 1) haywoo30@msu.edu. please use this e-mail for questions related to course material or laboratory assignments. This e-mail will be received by teaching assistant who will answer questions.
- 2) zuo@msu.edu. please use this e-mail to contact Professor Zuo, especially regarding course organization, labs assignments, exams or quizzes.

Text: Utts and Heckard, *Mind on Statistics*, Special Custom Edition for MSU. ISBN 9781305027381 includes the custom text and the custom MSU STT 201 eBook Printed Access Card. The textbook is available at bookstores or directly from publisher at <https://www.cengage.com/c/mind-on-statistics-6e-utts/9781337793605PF/> (Only the Utts/Heckard book is necessary, not the online version of the book or the case studies book) (Multiple copies of the textbook are available at the Main Library on Reserve: <https://libguides.lib.msu.edu/textbooks>)

Office hours: There is no announced office hours for this online course. However, contact TA or Prof. Zuo in a special case for an appointment or a zoom meeting (preferred). See <https://msu.zoom.us/> for the portal to access everything zoom related at MSU, see for video-tutorials <https://support.zoom.us/hc/en-us/articles/206618765-Zoom-Video-Tutorials>. Prof. Zuo prefers regular emails to other channels for communication or answering questions.

Course Description: Data analysis, probability models, random variables, estimation, testing hypotheses, confidence intervals, and simple linear regression. Bi-weekly lab using statistical software. STT 201-730 is taught with online instruction, online assignments, and examinations administered online. **There will be no face-to-face regular classroom live lectures. If you prefer the latter, please take other sessions later.**

Course Web Site: <https://loncapa.msu.edu/> will provide course information and submission forms for course assignments. Questions related to specific assignments can be posted on this website. The teaching assistant or Prof. Zuo will answer these questions via posts.

Course Material and Activities: STT 201 is a survey course of the most practical and commonly encountered statistical concepts and methods. The course is (self-)taught at an elementary mathematical level (college algebra). Students will receive bi-weekly email that announces the assignments and course activities. Please check your MSU email account **very frequently**.

Lab Assignments and Quizzes: Students will be using the statistical package Minitab for **Windows**, which is installed on computers in labs on campus. Minitab is available for student rental at www.onthehub.com/minitab. A version of Minitab called Minitab Express is available for Mac computers. Students will need to use their MSU student e-mail to get the academic pricing for a purchase or rental.

Students are required to become familiar with the basic commands of Minitab in order to access, store, create and analyze data. There will be 7 laboratory assignments each worth 10 points. The laboratory assignments are included in the course text and posted on the LON-CAPA course web site. LON-CAPA submission of each lab is due by dates and times specified in the course schedule on the schedule page of the syllabus. **No late labs will be accepted.** Two lowest lab scores will be dropped though.

There will be 3 online quizzes, each worth 10 points administered via LON-CAPA web site. The quizzes will be available in the folder called Quizzes beginning Wednesday of the quiz week and need to be completed before 6 pm on Fridays 01/22, 02/19, and 04/16. **Once a quiz is started, students will have 40 minutes to complete it (unpausely) online.** One lowest quiz score will be dropped. **No make-up quiz will be allowed.**

Exams administered on LON-CAPA:

Midterm exam: 03/05/21, 7:00 am - 9:20 pm. (100 minutes)

Final exam: 04/26/21, 7:00 am - 9:20 pm. (100 minutes).

The course is divided into four units:

Unit 1: Chapters 1-4; Unit 2: Chapters 7-9; Unit 3: Chapters 10-13; Unit 4: Chapters 14-15.

A set of review problems will be available for each unit on LON-CAPA web site. The midterm exam will cover Units 1 and 2 (chapters 1-4, 7-9). The final exam covers Units 3 and 4 (Chapters 10-15).

Midterm and final exams, each worth 75 points, carry out on LON-CAPA. Students with reasonable and valid excuses may make the appropriate arrangements to take exams at different date and time. The arrangements must be made **at least a week in advance of the exam** and **approved by Prof. Zuo.**

Note: The midterm and final exams are supposed to be "closed book" and "closed notes". The exams will contain questions concerning text material and problems, and computer projects. Missing an exam without an advance valid excuse presented to the instructor will result in a score of 0 points. Students who must miss an exam because of medical or family emergency or other exceptional circumstances should present **a valid excuse** to Prof. Zuo to arrange a make-up.

Evaluation: Points are earned through computer laboratory assignments (50 points), quizzes (20 points), midterm exam (75 points) and final exam (75 points).

Points towards grade

<i>Source</i>	<i>Maximum Points</i>
Lab assignments (best 5 of 7)	50
Quizzes (best 2 of 3)	20
Midterm Exam	75
Final Exam	75
Total	220

Grading Scale: 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	65-72%	2.0
85-89%	3.5	60-64%	1.5
79-84%	3.0	55-59%	1.0
73-78%	2.5	0-54%	0.0

Academic Integrity: All students are expected to adhere to the University policy on academic integrity. [Article 2.III.B.2](#) of the SRR states: “The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards.” In addition, STT201-730 adheres to the policies on academic honesty specified in General Student Regulation 1.0, [Protection of Scholarship and Grades](#); the all-University Policy on [Integrity of Scholarship and Grades](#); and [Ordinance 17.00](#), Examinations. For more information about this, please visit the Spartan Life web sites at <http://www.vps.msu.edu/SpLife/>.

Help Room: All in-person help rooms are closed until further notice. The STT help room has moved to Zoom. The Statistics Helproom is now called the Statistics Learning Center (SLC) <https://stt.natsci.msu.edu/academics/statistics-learning-center/>

Important Dates: (please also check <https://reg.msu.edu/roinfo/calendar/academic.aspx>)

01/11/21	Class begins.
01/18/21	Holiday - University Closed.
03/02-03	Wellness days (break days)
03/10/21	Middle of the Semester; last day to drop with no grade
04/21/21	Last Day of Class
03/05/21	Midterm Exam
04/26/21	Final Exam

Course Schedule:

(Note: numbering of labs is the same as in the textbook)

Week of	Assigned reading	Computer laboratory assignments	Exams	Quizzes
01/11/21	1.1-1.3	Lab 1 due by 6 pm on Friday 01/22/21		
01/18/21	2.1-2.7			Quiz 1 due by 6 pm on Friday 01/22
01/25/21	3.1-3.5	Lab 3 due by 6 pm on Friday 01/29		
02/01/21	4.1-4.4			
02/08/21	7.1-7.5	Lab 5 due by 6 pm on Friday 02/12		
02/15/21	8.1-8.6			Quiz 2 due by 6 pm on Friday 02/19
02/22/21	9.1-9.9			
03/01/21	10.1-10.4			Mid-term Exam on 03/05/21
03/08/21	11.1-11.5	Lab 7 due by 6 pm on Friday 03/12		
03/15/21	12.1-12.4			
03/22/21	13.1-13.6	Lab 9 due by 6 pm on Friday 03/26		
03/29/21	14.1-14.3			
04/05/21	15.1	Lab 11 due by 6 pm on Friday 04/09		
04/12/21				Quiz 3 due by 6 pm on Friday 04/16
04/19/21		Lab 14 due by 6 pm on Friday 04/23		
04/26/21				Final Exam on 04/26

Suggested Exercises: We have selected some exercises from the textbook that illustrate some of the ideas covered in class. These exercises have been selected to help you in understanding of the material. The answers to these exercises are found in the textbook, and your solutions will not be collected or

graded. If you encounter difficulty or are slow in solving problems, you should re-study the material, seek help, and do additional exercises to improve your mastery of the concepts and methods.

The textbook uses this terminology for its exercises: Exercise 3.13 refers to exercise 3.13 of Chapter 3, found on page 102; Exercise 8.27 refers to exercise 8.27 of Chapter 8, found on page 308. These are among the suggested exercises listed below.

Chapter 1: 1.11, 1.13, 1.17, 1.19, 1.25, 1.27, 1.39.

Chapter 2: 2.1, 2.3, 2.5, 2.13, 2.17, 2.27, 2.29, 2.37, 2.39, 2.51, 2.57, 2.63, 2.85, 2.87, 2.91, 2.93, 2.99, 2.103.

Chapter 3: 3.1, 3.3, 3.7, 3.13, 3.19, 3.39, 3.43, 3.61, 3.63, 3.65, 3.81.

Chapter 4: 4.3, 4.7, 4.15, 4.17, 4.19, 4.21, 4.37, 4.53, 4.55.

Chapter 7: 7.9, 7.21, 7.23, 7.39, 7.41, 7.45, 7.47, 7.57, 7.59, 7.95, 7.105.

Chapter 8: 8.3, 8.9, 8.11, 8.27, 8.29, 8.31, 8.39, 8.43, 8.45, 8.51, 8.63, 8.67, 8.69, 8.71, 8.77.

Chapter 9: 9.1, 9.9, 9.13, 9.15, 9.23, 9.37, 9.39, 9.41, 9.47, 9.55, 9.59, 9.61, 9.69, 9.113.

Chapter 10: 10.5, 10.7, 10.11, 10.15, 10.19, 10.21, 10.23, 10.35, 10.45, 10.57, 10.63.

Chapter 11: 11.3, 11.5, 11.11, 11.13, 11.25, 11.27, 11.43, 11.51, 11.53, 11.83.

Chapter 12: 12.3, 12.7, 12.21, 12.49, 12.51, 12.55, 12.63, 12.83.

Chapter 13: 13.9, 13.17, 13.23, 13.25, 13.35, 13.39, 13.49, 13.59.

Chapter 14: 14.1, 14.5, 14.19, 14.27, 14.47, 14.55.

Chapter 15: 15.3, 15.5, 15.9, 15.11.

Disclaimer: The instructor reserves the right to make any changes he considers academically advisable. Changes will be announced on the LON-CAPA course website and or in his emails. It is your responsibility to keep up with any changed policies or announcements. Please keep checking your MSU email account **very frequently**.

Final Remarks:

- (i) This is an online course; students are expected to **self-teaching/learning** and there will be no live voice lectures. If you are used to the classroom lectures, you should simply drop the current course and take the other sessions later.
- (ii) There are two email accounts you can use, the usage of the two has been explained at the very beginning. The instructor likes to give opportunities to TA for simple and straightforward questions and routine ones. Difficult ones will be eventually tackled by the instructor. Besides, the instructor is also responsible for handling other regular chores of the course.
- (iii) D2L is another system in MSU for online course. However, D2L cannot handle numerical responses to questions, only multiple choices. Numerical responses are especially important for labs where students generate their own data, so numbers within certain range can be accepted as correct answers. For example, pi in LON-CAPA can be accepted as correct if you use 3.14 or 3.1415 or 3.1415926, etc. But in D2L, one cannot do this. These are some of reasons for us to adopt LON-CAPA for this Statistics course.