Syllabus: STT 315 [Sections 1-4], Fall 2019¹

This Syllabus serves Sections 1-4 of STT 315 for Fall 2019. The course instructor reserves the right to make revisions to the Syllabus and the course schedule that he considers to be academically advisable. It is students' responsibility to keep up with any changed policies and assignments.

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Teaching Assistant: MINWOO KIM

Office: C507 Wells Hall, Email: kimminw3@msu.edu, Phone: 517-884-1429. Office Hours: Mon & Wed 10:00-11.00 a.m., or by appointment.

Lecture meeting: Mon & Wed 8.30-9.50 a.m. at B117 Wells Hall.

Course web page: http://loncapa.msu.edu/.

MSU username and password are required to login to Lon-Capa. Follow the links 2019 Fall, STT315.

Required Course Materials:

- 1. McClave, Benson and Sincich: Statistics for Business and Economics, 13th Edition, Pearson, 2018.
- 2. Scientific calculator (TI-84 Plus calculator is highly recommended).
- 3. Top Hat App.

| Important Dates | | | | |
|-----------------|--|--|--|--|
| <u>Unit 1</u> | | | | |
| Aug 28 | First day of class | | | |
| Sep 02 | Labor Day Holiday - University Closed | | | |
| Sep 04 | Open adds end (8:00 pm) | | | |
| Sep 19 | Quiz 1 [During recitation hours] | | | |
| Sep 23 | Last day to drop a class with refund (8:00 pm) | | | |
| Sep 30 | Exam 1 (8.30-9.50 a.m.) | | | |
| | Unit 2 | | | |
| Oct 16 | Middle of Semester - deadline to drop with no grade (8:00 pm) | | | |
| Oct 17 | Quiz 2 [During recitation hours] | | | |
| Oct 30 | Exam 2 (8.30-9.50 a.m.) | | | |
| UNIT 3 | | | | |
| Nov 15 | Last day to inform the instructor if you require an alternative final exam date | | | |
| | due to 'conflict with final exam time,' or 'three finals on same day (one of which is STT 315).' | | | |
| Nov 21 | Quiz 3 | | | |
| Nov 28-29 | Thanksgiving Holiday - University Closed | | | |
| Dec 2 | Exam 3 (8.30-9.50 a.m.) | | | |
| Dec 04 | Last day of class | | | |
| Dec 06 | Submission deadline for all Lon-Capa homework (by 11.59 p.m.) | | | |
| Dec 9 | Final Exam (7:45am - 9:45 a.m.) | | | |

¹Last updated on August 27, 2019

Learning objectives: The learning objective is to understand some basic probability and statistical concepts and methods that are applicable in business as well as in many other fields of study. The learning objectives are achieved by study and problem solving aided by class attendance and diligence. Your study should include the thoughtful reading of textbook material from Chapters 1-7 and attention to the materials added in the lectures. Regular attention to the on-line homework administered through Lon-Capa is critical to success in the course.

This course will not make you an expert in statistics but will get you started with some of the basic concepts. At the end of this course a student should be able to (a) distinguish types of data, (b) display data correctly, (c) calculate the measures which are used for describing data, (d) calculate probabilities, (e) calculate expected value and variance of random variables, (f) make statistical inference about a population proportion, (g) make statistical inference about a population mean.

No. of Credits: 3. Prerequisite: MTH 124 or MTH 132 or MTH 152H or LB 118.

Lecture meeting: Mon & Wed 8.30-9.50 a.m. at B117 Wells Hall.

The main course material will be covered in the lectures. Students are expected to attend all lectures of the course. If you miss a lecture for whatever reason, you are responsible for all covering materials, assignments and deadlines. Your attendance and class participation during the lecture hours will be monitored using Top Hat app.

Top Hat: Top Hat app is a classroom response system available for instructors at MSU. It is used to engage students with interactive content during their classroom lectures. Students can use their own mobile devices, such as cell phones, tablets or laptops, to answer in-class questions, to participate in surveys and can view annotated slides. Attendance can also be monitored using Top Hat.

"Students need to set up a separate account in Top Hat and pay a subscription fee in order to use the system. Students pay one fee for access to unlimited courses during that time period. For example, a one semester subscription for 24 gets them access to unlimited courses for one semester." [Source: *Technology at MSU*]

The class-participation and the attendance during lecture contribute 5% of the total grade.

Recitation Hours & Quizzes: The recitations will be used for supplementary material and problem solving. Recitations meet according to following timetable:

| Section | Time | Room |
|---------|--------------------------|-----------------|
| 1 | Thu 08:00 a.m 08:50 a.m. | A218 Wells Hall |
| 2 | Thu 09:10 a.m 10:00 a.m. | A130 Wells Hall |
| 3 | Thu 10:20 a.m 11:10 a.m. | A308 Wells Hall |
| 4 | Thu 11:30 a.m 12:20 p.m. | A326 Wells Hall |

You must attend your own section's recitation. Attending recitations is obligatory. Recitations contribute 10% of the grades for the course - these will be based on attendance (5%) and quizzes (5%). Quizzes will take place during recitation hours on:

 Quiz 1: Sep 19
 Quiz 2: Oct 17
 Quiz 3: Nov 21

Quizzes will contribute 5% of the grades. *The lowest quiz score will be dropped*. **There will be no make-up quizzes.** If you have to miss a quiz for whatever reasons, that quiz is graded zero, and would be considered as the quiz to be dropped.

Homework Assignments: Homework problems will be regularly assigned on Lon-Capa. They are either of multiple choice type or objective numerical type. You will answer them online, and your responses will be checked by the software. Usually you will have more than one attempt to get a correct answer on each part of each exercise - number of attempts depends on the question. Once a homework is opened it will remain open till **Dec 6, 2019**, when it will close at 11.59 p.m. So you have ample time to work on it. However, to get the most out of homework you should work on them as we cover a chapter in class or soon after. *There is no make up for homework assignment.* Homework will contribute 15% of the grade.

Examinations: The course is divided into three unit; each unit ends with one unit exam. There will be a final exam at the end of the course. *All exams will take place in the lecture hall.*

The exams will consist of multiple choice type questions. They are all closed book, closed notes exams. However, you may bring one $8.5'' \times 11''$ sheet of paper with formulas and notes written or typed on both sides to each exam. Tables will be provided with the exams when it is appropriate to do so. Calculators such as the TI-84 Plus are helpful and, if you plan to use one, it should be brought to exams and recitations. Further information on these matters, if necessary, will be given in the class and will be published in the course web page.

| Exams | Date | Time | Location |
|-------------|--------------|---------------------------------|-----------------|
| Unit Exam 1 | Mon Sep 30 | 8:30-9:50 a.m. | B117 Wells Hall |
| Unit Exam 2 | Wed Oct 30 | $8{:}30{-}9{:}50~\mathrm{a.m.}$ | B117 Wells Hall |
| Unit Exam 3 | Mon Dec 02 | 8:30-9:50 a.m. | B117 Wells Hall |
| Final Exam | Mon Dec 09 | $7{:}45{-}9{:}45~a.m.$ | B117 Wells Hall |

- The lowest of Unit Exam 1, 2 and 3 will get 10% weight, and the remaining two will each get 20% weight. The final exam will contribute 20% of the grade.
- Missing an exam will result in a score of zero points. If you miss an exam, you must inform the instructor within 3 business days. Make-up exams will be given only with a legitimate and verifiable documentation.
- Before each unit exam, the topics of that exam will be posted on Lon-Capa. Final examination is comprehensive. By "comprehensive" we mean that questions can come from any topic covered in the course. However, it does not mean that all topics will have equal weights, nor does it mean that questions will be asked on every topic we covered.
- According to the MSU guideline, you will fail the course automatically if you do not take the final exam.
- According to the Final Exam Policy of MSU, "Any deviations from the final examination schedule must be approved by the Office of the Registrar based on the recommendation of the assistant/associate dean of the college responsible for the course offering." So no request for different time for final exam will be entertained to suit travel plan unless authorized by relevant authority.
- However, you may request for a change in your final exam time because of *either conflict with other final exam, or if you have three finals on a single day* in that case, you should notify me no later than **November 15, 2019**.
- Students who receive VISA (Verified Individualized Services and Accommodations) form from the RCPD, and require special accommodation for the exam(s) and quiz(zes) must contact the course instructor well ahead of time (at least 3 business days before the exam). Alternatively they can request RCPD to organize their accommodation.

| Unit exams (lowest 10% + best $2 \times 20\%$) | |
|---|------|
| Final exam | 20% |
| Homework assignments | 15% |
| Recitation attendance | 5% |
| Quizzes (best $2 \times 2.5\%$) | 5% |
| Lecture attendance & participation (Top Hat) scores | 5% |
| Total | 100% |

Grading Scales: Weights of different components of the total grade:

Your grades will be determined by the following grading scale (tentative):

| 4.0: $90\% \le \text{Score} \le 100\%$ 2.0: $63\% \le \text{Score}$ | e < 70% |
|---|---------|
| $3.5: 83\% \le \text{Score} < 90\%$ $1.5: 56\% \le \text{Score}$ | e < 63% |
| $3.0: 76\% \le \text{Score} < 83\% \qquad 1.0: 50\% \le \text{Score}$ | e < 56% |
| 2.5: $70\% \le \text{Score} < 76\%$ $0: 0\% \le \text{Score}$ | e < 50% |

Where to go with questions: A FAQ (Frequently Asked Questions) section will be posted and regularly updated on Lon-Capa. Please check the FAQ before you ask for the help.

If you need any help in course materials and administrative matters, please first contact your Recitation Instructor. Please make sure that you mention STT 315 in the subject of the e-mail. Also where relevant mention your section number in the email; without that information, it is difficult to sort through a list of more than 100 students.

Students can get help on course materials by going to **Statistics Help Room** located at A102 Wells Hall. Help Room schedule is posted on: http://www.stt.msu.edu/Academics/. Please come prepared with specific questions after reading assigned materials. Do not expect to be taught the basics from scratch in the Help Room.

Academic Honesty: The Department of Statistics and Probability adheres to the policies of academic honesty as specified in the General Student Regulations 1.0, Protection of Scholarships and Grades, and in the All-University of Integrity of Scholarships and Grades which are included in Spartan Life: Student Handbook and Resource Guide. Plagiarism or any other sort of fraudulent behavior in exam and/or homework assignment will result in an automatic zero in that exam and/or homework assignment.

ADA: To arrange for accommodation, a student with special need should contact the Resource Center for People with Disabilities [Phone: 353-9642, Web Site: http://www.rcpd.msu.edu].