STT 351 Syllabus – The FAQ Version

What is this class about?

Course Description

STT 351 is a three-credit course in probability and statistics. Topics include probability models and random variables, estimation, confidence intervals, tests of hypothesis, simple linear regression, and applications to engineering.

Prerequisite

MTH 234 or MTH 254H or LB 220. Not open to students with credit in STT430.

Course Objectives

The purpose of this course is to give you experience with probability and statistical procedures in personal and professional spheres, including where they are used, how they are used, the advantages they provide, and their limitations. The course requires the TI-84 (or similar calculator or software such as R) for most calculations and uses real-life data and situations wherever possible. This course will also provide you with a foundation for future Statistics courses.

This course will strive to add to your progress towards meeting the MSU Undergraduate Learning Goals:

- Analytical Thinking
- Cultural Understanding
- Effective Citizenship
- Effective Communication
- Integrated Reasoning

Who is the instructor and how do I contact them?

The instructor for US25 STT351 Section 101 is Dr. Young-geun Kim who is an Assistant Professor at the Department of Statistics and Probability.

The instructor's email is kimyo145@msu.edu. All course related emails must be sent to this email. You should only use your MSU email and indicate STT351 in the subject line in all communications along with the subject of your email. The instructor will respond to you within one business day. Emails received after 5:00 pm on Friday may not be addressed until the following Monday morning.

- Please do not email the instructor's D2L email.
- See D2L course homepage for office hours details.

How will the instructor contact me?

Course-wide announcements will be made on the **course homepage on D2L** https://d2l.msu.edu in the **Latest Course Update** widget on top and a copy will be kept in the **Announcements** on the course homepage in D2L. You will also occasionally receive emails from the instructor, and some announcements may also be made during class meetings. It is your responsibility to check the D2L course homepage and email regularly, at least once every day.

What is the class format?

STT 351 Section 101 is an in-person class, held MWF from 12:40pm to 2:30pm in Erickson Hall 128 (except for June 13, which will be online). This means that you have to attend class meetings and exams at a fixed specified time throughout the course. This also means that you are responsible to set aside time each day to work on the course and meet the due dates and deadlines set for the assignments and exams.

To be successful, we recommend you spend around **18 hours per week** learning course material and completing assignments. You should not try to do all the work in one day of the week but instead spread out your work hours across several days. Start work on the weekly tasks early so you have enough time to complete them.

Course Overview

- The course will run for 7 weeks from May 12, Monday till June 27, Friday.
- Content modules (except Module 2) go from Mon 10pm to Mon 10pm, see **Schedule Table under** "What are the due dates?" section of the syllabus.
- Exams will be held **in person during class time** in the third week on Friday (May 30), the fifth week on Wednesday (June 11), and the seventh week on Friday (June 27). Please refer to the Schedule Table.
- There will be 6 In-class Pop Quizzes.
- All course materials can be accessed through **D2L** including the Textbook/HW platform, **WebAssign**.
- The course consists of 1 START HERE: Syllabus Module, 6 Content Modules and 3 Exam Modules.
- All HW due dates will be on Mondays at 10pm except HW2, see Schedule Table.
- The Content Modules will consist of selected chapters and sections from Devore textbook. Note that the module numbers don't match the Chapter numbers.
- Each week students will work on a content module.
- On the third-, fifth-, and seventh-week students will, on top of working on the content module, prepare for and take an exam.

The course will begin with the START HERE: Syllabus Module and Module 1. During this week you will:

- learn about the course by reading the syllabus and completing a syllabus check.
- complete a Start of Course survey on D2L.
- complete Module 1.

Module Overview

- Each content module will open on Mondays at 10pm and close on the following Monday at 10pm (except Module 2; see Schedule Table).
- Each module will consist of:
 - > A set of videos from Cengage.
 - Readings of relevant sections from the textbook.
 - > One HW (2 parts to each HW) for each module
- All materials can be accessed in the Content area on D2L.

Each of these course components is explained in detail in the "What are the assignments?" and "When are the exams and what format will they take?" sections of the syllabus.

What materials do I need?

- Required Devore Textbook 9th ©2016 WebAssign: The WebAssign platform will be used for all homework assignments. Students must purchase access to <u>WebAssign at a discounted price</u>. You do not need to buy the textbook (Probability and Statistics for Engineering and the Sciences, 9th edition) separately as you will have access to the eBook through WebAssign. There is help available on the WebAssign platform for technical issues. See "START HERE: Syllabus module" for details. You must access WebAssign through D2L to receive this discounted price.
- Required Stable, high-speed internet: Information about how students can access internet connections, including those companies offering students free or reduced cost internet can be found at https://remote.msu.edu/learning/internet.html.
- Strongly recommended Graphing calculator capable of calculating probability distributions
 TI-83/84, TI-89, TI-Nspire, or similar models.

What are the due dates?

All HW assignments (except HW2) are due on Mondays at 10:00 PM US Eastern Daylight Time (EDT) (see Schedule Table) as stated on the schedule table. If you reside in a different time zone, you will need to adjust accordingly. For example, if you live in the US Pacific time zone, you will need to complete your work by 7:00 PM etc. Exams will be held in person during class time (12:40pm-2:30pm) on May 30, June 11, and June 27 as stated on the schedule table. There will be 6 In-class Pop Quizzes.

Course schedule

The following table contains the planned due dates for this semester. Due dates may be extended at the discretion of the instructor(s) in the event of university-wide technology disruptions or other emergencies. All such extensions will be announced on the D2L course homepage and via email.

| SCHEDULE TABLE | | | | |
|----------------|-------------------|---|--|--|
| Week | Due at 10pm EDT | Module or Exam Due | | |
| 1 | Monday, May 12 | First day of Summer One (Nothing due) | | |
| 2 | Monday, May 19 | START HERE: Syllabus Module and Module 1 | | |
| 3 | Tuesday, May 27 | Module 2, to accommodate Memorial Day | | |
| 3 | Friday, May 30 | Exam 1 (in-person) | | |
| 4 | Monday, Jun 2 | Module 3 | | |
| 5 | Monday, Jun 9 | Module 4 | | |
| 5 | Wednesday, Jun 11 | Exam 2 (in-person) | | |
| 6 | Monday, Jun 16 | Module 5 | | |
| 7 | Monday, Jun 23 | Module 6 | | |
| 7 | Friday, Jun 27 | Exam 3 (in-person) and Extra Credit Problems (Last day of | | |
| | | Summer One) | | |

| | SCHEDULE CALENDAR (All times are listed in EDT; There will be 6 In-class Pop Quizzes) | | | | | |
|-------|---|-----------------------------|-------------------------------|-------------------------------------|---|-------|
| Su | Мо | Tu | We | Th | Fr | Sa |
| | 05/12 Classes Begin | 05/13 | 05/14 > Open Add Period Ends | 05/15 | 05/16 | 05/17 |
| 05/18 | 05/19 > Syllabus Module and Module 1 Due (10pm) | 05/20 | 05/21 | 05/22 > Tuition Refund Period Ends | 05/23 | 05/24 |
| 05/25 | 05/26 ➤ Holiday | 05/27 > Module 2 Due (10pm) | 05/28 | 05/29 | 05/30 ➤ Exam 1 (inperson) | 05/31 |
| 06/01 | 06/02 > Module 3 Due (10pm) | 06/03 | 06/04 | 06/05 | 06/06 | 06/07 |
| 06/08 | 06/09 > Module 4 Due (10pm) | 06/10 | 06/11 > Exam 2 (in- person) | 06/12 | 06/13 ➤ Online class | 06/14 |
| 06/15 | 06/16 > Module 5 Due (10pm) | 06/17 | 06/18 | 06/19 Moliday | 06/20 | 06/21 |
| 06/22 | 06/23 > Module 6 Due (10pm) | 06/24 | 06/25 | 06/26 | 06/27 Classes End Exam 3 (inperson) Extra Credit Problems Due (10pm) | 06/28 |
| 06/29 | 06/30 | 07/01 | 07/02 ➤ Grades Due | | | |

What are the HW assignments?

| Component | Individual weight | Total weight |
|--|----------------------|-----------------|
| Syllabus Check | 1% | 1% |
| 6 WebAssignHW# assignments done online on WebAssign platform | 1.5% each | 9% |
| 6 D2LHW# assignments handwritten/typed and uploaded to D2L | 3.5% each | 21% |

Syllabus Check

During the first week you will get to know the course by reading and reviewing the syllabus. As part of this you will do the Syllabus Check quiz on D2L which will be worth 1%.

HW format

Homework assignments will be done in two parts, online on WebAssign, and handwritten/typed and uploaded on D2L.

- One part will be the graded online HW on WebAssign, called WebAssignHW# and this would be auto graded and auto synced to D2L. You will have multiple attempts for each part of each problem.
- The other part is called D2LHW# and will consist of <u>SELECTED</u> problems from the same set of
 questions in WebAssignHW#. Students will write/type their work including steps, formulas,
 reasoning, etc. in this part, then scan, <u>save their work as a pdf and upload to D2L</u>. This will be
 manually graded for partial credit. See D2LHW# Assignment drop box for instructions under each
 module.
- Do not upload other file formats like HEIC, JPEG, GIF, etc.
- Over-reliance on GenAl tools and/or making use of results of GenAl queries without sufficient
 understanding of course content and sufficient critical thinking is likely to decrease both your
 learning of course material and your grade in the course. In their current state of development, we
 recommend minimal or no use of GenAl tools.

HW policy:

- None of the homework assignments will be dropped.
- It is your responsibility to complete homework assignments as early as possible to avoid potential incidents.
- You may request a one-day extension for any two homework assignments for any reason during the
 course. You can make the request yourself automatically on WebAssign. Students who use more
 than 2 such extensions may be penalized up to 25% for each extra extension at the end of the
 course.
 - Assignments that have been extended will be due on the day after the due date at 10:00 PM.
 - Extension requests received 24 hours after the due date will not be considered except under extreme situations as outlined in the "What should I do if I get sick or have another emergency?" section.

When are the exams and in-class pop quizzes and what format will they take?

There will be three non-comprehensive exams on the following dates. All times listed are US Eastern Daylight Time. In addition, there will be six in-class pop quizzes given during randomly selected class meetings without prior notice. The purpose of these quizzes is to review key concepts and encourage attendance. The quizzes will not be graded for correctness; instead, students will receive full credit for each pop quiz if they participate.

| Exam or | Content | Weight | Date | Open | Close |
|---------|-------------------------------|-------------|-------------|---------|--------|
| Quiz | | | | Time | Time |
| Exam 1 | Modules 1 - 2 | 21% | Fri May 30 | 12:40pm | 2:30pm |
| Exam 2 | Modules 3 - 4 | 21% | Wed June | 12:40pm | 2:30pm |
| | | | 11 | | |
| Exam 3 | Modules 5 - 6 | 21% | Fri June 27 | 12:40pm | 2:30pm |
| 6 Pop | Material covered prior to the | 1% each (6% | Random | Random | Random |
| Quizzes | quiz day | total) | | | |

If you are unable to take the exam at the date and time window specified above, please contact your instructor at least one week before the exam date.

Exam format:

At the end of two modules, as stated in the Schedule Table in What are the due dates?, there will be an exam.

- Each exam will be held in person during class time (12:40pm 2:30pm) in the third week on Friday (May 30), the fifth week on Wednesday (June 11), and the seventh week on Friday (June 27).
- You must complete your exam and submit your answers to the instructor by the end time (2:30 PM). If you submit late, you may be penalized 25%.
- Exams are **not** cumulative and only cover the content specified, however, there will be some fundamentals from earlier modules that will carry through to future exams.
- You may use a cheat sheet on exams, see instructions in the exam module.
- You may use a graphing calculator on exams.

Make-up exams and quizzes

- Typically, a missed exam or quiz will be counted as a 0. Make-up exams and quizzes may be given on a case-by-case basis. Valid reasons to take the make-up include:
 - medical reasons
 - university sanctioned event
 - religious holidays
 - military obligation
- If you begin the exam or quiz too late, had the wrong day on your schedule, or missed the exam or quiz for any unexcused reason, you might not be allowed to make it up and may receive a zero. In such cases, if you are allowed to take a make-up, you will receive a penalty of 25% of the total points

possible on the exam or quiz. Any missed exams with no communication with the instructors within 24 hours (except for extreme emergencies) may receive a 0.

How will my grade be calculated?

Your grade will be based on a weighted scale. Your percentage score on each component of the course will contribute to your grade according to the breakdown below:

| Component | Individual weight | Total weight |
|---|---------------------|--------------|
| Syllabus check | 1% | 1% |
| 6 WebAssignHW# assignments done online on WebAssign | 1.5% each | 9% |
| platform | | |
| 6 D2LHW# assignments handwritten/typed and uploaded | 3.5% each | 21% |
| to D2L | | |
| 6 In-class Pop Quizzes | 1% each | 6% |
| 3 Exams (in-person) | 7% + 14% = 21% each | 63% |
| Total | | 100% |
| 6 Extra Credit# assignments with each HW on WebAssign | 0.5% EC each | 3% EC |

We fully expect final course grades to be assigned based on the grading scale below. We do not curve the class unless there is a major problem (which is rare.) Don't expect a curve.

| Grade | Range |
|-------|---------------|
| 4.0 | 90% and above |
| 3.5 | 85% - 89.99% |
| 3.0 | 80% - 84.99% |
| 2.5 | 75% - 79.99% |
| 2.0 | 70% - 74.99% |
| 1.5 | 65% - 69.99% |
| 1.0 | 55% - 64.99% |
| 0 | 0% - 54.99% |

- <u>Final grades are rounded to two decimal places.</u> We don't move cutoffs. Many people end up close to cutoffs, but moving cutoffs only creates more people being close to the new cutoffs, etc. **Email requests to round grades or change the cutoffs at the end of the semester will not receive a response.**
- Any questions about the grading policy or your standing in the class can be directed to the instructional team through email or during office hours.
- An I-Incomplete may be given only when: the student (a) has completed at least 6/7 of the term of
 instruction but is unable to complete the class work and/or take the final examination because of
 illness or other compelling reason; and (b) has done satisfactory work in the course; and (c) in the
 instructor's judgment can complete the required work without repeating the course.

Where can I go for tutoring?

Office Hours

See D2L course homepage for details.

Statistics Learning Center

The statistics learning center (SLC) will be available via Zoom. See D2L course homepage for details.

This help service exists and is designed to **supplement** a student's learning and comprehension of online course materials. Note that the SLC is not a substitute for lectures, supplementary/example videos and reading the textbook.

Please be respectful of the tutors and other students in the SLC. Come with specific questions after you have done your best to find the answers in the course lectures and other learning materials. Also be aware that the SLC tends to be crowded in the hours just before assignments are due. You will get more attention and have more time to ask questions if you go early.

Instructions, links and the SLC schedule can be accessed from the course homepage on D2L and at https://stt.natsci.msu.edu/academics/statistics-learning-center/.

Is there any Extra Credit?

Yes. Extra credit of 3% will be offered and added as a bonus on top of the grade you earn at the end of the course.

| Component | Individual weight | Total weight |
|---|-------------------|--------------|
| 6 Extra Credit# assignments with each HW on WebAssign | 0.5% EC each | 3% EC |

Extra Credit WebAssign Assignments

Associated with each homework assignment in WebAssign is an extra credit assignment you can do for practice. These contain problems similar to those in the actual homework assignment. Partial credit for each problem will be awarded. There are several attempts for each extra credit problem and the extra credit assignments, once opened, will remain open all semester until the last day of the course. Each Extra credit assignment is worth 0.5%. This means that completing all extra credit problems will contribute an extra 3% to your overall course grade. You don't have to upload your work for these assignments.

These are the only extra credits that will be offered in the course. We strongly recommend that you work on them throughout the semester as part of your coursework each week or as you prepare for exams. It takes many hours to complete all the extra credit problems.

What should I do if I get sick or have another emergency?

We have anticipated that some students may encounter interruptions to their studies for any number of reasons (e.g., illness, need to provide medical or childcare, sustained loss of internet, etc.) and have plans in place accordingly.

- If you encounter a prolonged period where you are unable to engage in course content and complete assignments, you should send an email to the instructors **as soon as you are able** so that individualized accommodations can be made.
- If you will be unable to do class work and can provide documentation of the obstacle you face, we intend to work hard to accommodate your situation with empathy.

Grief Absence Policy

The Statistics faculty and staff work hard to be sensitive and to accommodate the bereavement process of a student who has lost a family member or who is experiencing emotional distress from a similar tragedy so that the student is not academically disadvantaged in their class. The Statistics Department relies on the University's Grief Absence Policy to alert us of when it is appropriate to grant additional accommodation.

According to the University's Grief Absence Policy it is the responsibility of the student to: a) notify the Associate Dean or designee of their college of the need for a grief absence in a timely manner, but no later than one week from the student's initial knowledge of the situation, b) provide appropriate verification of the grief absence as specified by the Associate Dean, and c) complete all missed work as determined in consultation with the instructor.

It is the responsibility of the Associate Dean or designee to: a) determine with the student the expected period of absence – it is expected that some bereavement processes may be more extensive than others depending on individual circumstances, b) notify the faculty that the student will be absent, and c) receive verification of the authenticity of a grief absence request upon the student's return. https://reg.msu.edu/ROInfo/Notices/GriefAbsence.aspx.

What should I do if I need disability accommodations?

The STT 351 Instructional Team is committed to making this course accessible to persons with disabilities.

From the Resource Center for Persons with Disabilities (RCPD): Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or online. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form.

Please email your VISA form to the Instructor at the start of the term and/or two weeks prior to the accommodation date. While we will do our best, we may not be able to honor requests received after this date.

Is there an Honors option for STT 351?

No, we are not able to offer an honors option this semester.

What are other course policies I should be aware of?

Academic Honesty

All participants in this class are held to the standard set by MSU's Policy on Integrity of Scholarship and Grades. The policy can be read in full at the MSU Ombudsperson's website.

Spartan Code of Honor:

On March 22, 2016, The Associated Students of Michigan State University (ASMSU) adopted the following Spartan Code of Honor:

"As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do."

All course assignments, including homework, and exams, should represent your own work. You may receive tutoring assistance from the Statistics Learning Center or other tutors on your homework. You may not receive assistance with exams. Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also the Academic Integrity webpage.)

Generative Al Tools

Generative artificial intelligence (GenAI) models, including products like ChatGPT and Bard, are powerful tools that can (positively or negatively) affect teaching and learning. Used appropriately, they can enhance the value coursework provides you as a student. Used poorly, they can harm your understanding of class topics and your grade in the class. While not the focus of this course, we may provide guidance on the benefits and limitations of these models to support your learning. Over-reliance on GenAI tools and/or making use of results of GenAI queries without sufficient understanding of course content and sufficient critical thinking is likely to decrease both your learning of course material and your grade in the course. In their current state of development, we recommend minimal or no use of GenAI tools.

Limits to Confidentiality

All conversations and course materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors and TAs, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others. As the instructors, we must report the following information to other University offices (including the Department of Police and Public Safety) if you share it with us:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center.

Commitment to Diversity, Equity, and Inclusion

The STT 351 Instructional Team respects the diverse backgrounds and perspectives of all students. We strive to address students' learning needs and believe that the diversity that students bring to this class is a resource, strength, and benefit. We strive to present materials and activities based on real-life examples that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

We are still in the process of learning about diverse perspectives and identities. If something in course materials or policies makes you feel uncomfortable, please talk to your instructor about it. Your suggestions are encouraged and appreciated. Please let us know ways to improve the effectiveness of the course in this context for you personally or for other students or student groups.

Religious observance policy

MSU has implemented an updated religious observance policy, which may be viewed at https://provost.msu.edu/academic-resources/religious-observance-calendar. Please familiarize yourself with the updated policy. If a religious observance will cause a conflict for you with a class activity such as an exam, you must notify your instructor at least two weeks prior to the conflict.

Commercialization of Course Materials

As members of a learning community, students are expected to respect the intellectual property of course instructors. All course materials presented to students are the copyrighted property of Cengage and of the course instructors and are subject to the following conditions of use:

- Students may not share the course materials with individuals not enrolled in the class without the advance written permission of the course instructor and, if applicable, any students whose voice, image, or course work is included in the materials. Course materials include but are not limited to:
 - a. Lecture videos
 - b. Homework problems
 - c. Exam problems
- Any student violating the conditions described above may face academic disciplinary sanctions.

Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

Tolerance and Civility

In this online class you will be interacting with course instructors and other students online. Make sure that all your contributions are civil, respectful of other students and the instructors, and on topic.

The following statement was endorsed by the University Committee on Faculty Affairs and the University Committee on Student Affairs and approved by the Academic Council on April 20, 2010.

MSU strives to build an academic community with living and learning environments that expects tolerance of viewpoints and civility toward others, whether at public forums, athletic events, in residential communities, classrooms or laboratories.

We call upon all who participate in university events to promote tolerance and civil behavior and to hold themselves to high standards that reflect the university's commitment to respect viewpoints that may be different from their own. Only by respecting individuals with diverse perspectives and ideas can we build an environment of civility that is conducive to advancing knowledge and transforming lives.

Changes to Syllabus

The instructional team reserves the right to make changes to this syllabus as the semester progresses. Substantial changes will be announced on D2L and via email.