# Syllabus for STA257 "Probability and Statistics I" Summer 2019

Instructor: Dena Firoozi

Email: dena.firoozi@utoronto.ca

Office hours: In room 103A, Stewart Building, Tuesdays and Thursdays 5-6pm, by appointment.

**Course webpage**: Accessible through Quercus at <a href="https://q.utoronto.ca/">https://q.utoronto.ca/</a>

**Classroom sessions**: Tuesdays and Thursdays (from Tuesday May 7<sup>th</sup> to Thursday June 13<sup>th</sup>), 2-5pm, WB 116 (see <u>campus map</u>).

Tutorials: Tuesdays and Thursdays (from Thursday May 9<sup>th</sup> to Tuesday Jun 18<sup>th</sup>), 1-2pm

- Section 1: Michael Moon (michael.moon@mail.utoronto.ca), BA 2155
- Section 2: Sri-Amirthan Theivendran (<u>sriamirthan.theivendran@mail.utoronto.ca</u>), BA 2145
- Section 3: Lei Sun (<u>liam.sun@mail.utoronto.ca</u>), BA 2195

#### TAs' Office Hours:

- Michael Moon: Wednesdays 3:00-4:00 pm, SS 623B
- Sri-Amirthan Theivendran: Thursdays 12:00-1:00 pm, SS 623B
- Lei Sun: Wednesdays 10:00-11:00 am, SS 623B

## **Prerequisites**

- Prerequisites: (MAT135H1, MAT136H1(70%))/MAT137Y1/MAT157Y1 (MAT137Y1/MAT157Y1 is strongly recommended)
- Corequisite: MAT235Y1
- Exclusions: ECO227Y1/STA247H1, MAT377H1

You will be removed from the course by the Department if you do not meet the prerequisite/corequisite requirement (as instructor I have no control over enrollment in the course). Students who have deferred exams in prerequisite courses or have an equivalent course as a transfer credit should contact Gillis (gillis.aning@utoronto.ca) to request to be kept in the course.

#### **Course Content**

This course will provide an introduction to the fundamental concepts of probability and statistics. In particular this course will cover: probability models, random variables, discrete and continuous distributions, multivariate models, large-sample limiting results.

## **Textbook**

The textbook is "Introduction to Probability" by Dimitri P. Bertsekas and John N. Tsitsiklis, Second Edition, Athena Scientific, ISBN 978-1-886529-23-6. Chapters 1-5 will be covered. The first chapter and the solution manual is available at <a href="http://athenasc.com/probbook.html">http://athenasc.com/probbook.html</a>

Additionally, Chapters 1-4 of the following book may be useful as reference:

"Probability and Statistics - The Science of Uncertainty" by Michael J. Evans and Jeffrey S. Rosenthal, Second Edition. The PDF file is available at <a href="http://www.utstat.toronto.edu/mikevans/jeffrosenthal/">http://www.utstat.toronto.edu/mikevans/jeffrosenthal/</a>

# **Evaluation**

Test	Date	Percentage of Final Mark	Note
Quiz 1	May 16 <sup>th</sup>	5%	During Class time, 2:10-2:25pm
Quiz 2	May 23 <sup>rd</sup>	5%	During Class time, 2:10-2:25pm
Midterm Exam	May 30 <sup>th</sup>	30%	During Class time, 2:10-3:40pm
Quiz 3	June 6 <sup>th</sup>	5%	During Class time, 2:10-2:25pm
Quiz 4	June 13 <sup>th</sup>	5%	During Class time, 2:10-2:25pm
Final Exam	TBD	50%	TBD

*Note 1:* You must bring your student identification to the quizzes, midterm test, and final exam. The location of the term test will be announced later.

*Note 2:* You are permitted to use a basic scientific hand-calculator for the quizzes/exams. Any calculator that has logarithmic functions will be sufficient. Calculators on phones or other devices equipped to communicate with the outside world (for example, through the internet) will not be permitted during quizzes, the midterm exam, or the final exam. Programmable calculators are not allowed.

*Note 3:* Crib sheets are not permitted. I will provide you with a set of formulae in the midterm/final exams (and quizzes if needed).

# Assignments

Assignments are for your home preparation and will be posted on the course website. They are not to be handed in. The problems will be solved and discussed in the tutorials.

# **Re-Evaluation of Tests**

For requests to have a quiz or exam re-evaluated one must send an email to the instructor with a justification for consideration. The request must be made within one week of the date the work was returned.

## **Missing a Quiz or Midterm**

If a quiz or the midterm exam is missed for a valid medical reason, you must submit the University of Toronto Verification of <u>Student Illness or Injury form</u> to the instructor within one week of the quiz/test. (Come to any lecture or office hours.) The form will only be accepted as valid if the original paper form is submitted, filled out according to the instructions on the form.

*Important:* The form must indicate that the degree of incapacitation on academic functioning is moderate, serious, or severe in order to be considered a valid medical reason for missing the midterm exam. If the form indicates that the degree of incapacitation on academic functioning is negligible or mild then this will not be considered a valid medical reason.

If a quiz/the midterm exam missed for a valid reason, the mark will be proportional to the total mark of other quizzes, the midterm and final exams.

Other reasons for missing a quiz/test will require prior approval by your instructor. If prior approval is not received for non-medical reasons then you will receive a grade of zero for that quiz/exam.

# **Online Discussion Board: Piazza**

You will have the option to use Piazza for class discussion. If you decide not to use Piazza it will not disadvantage you in any way, and will not affect official University outcomes (e.g., grades and learning opportunities). If you choose not to opt-into Piazza then you can ask questions or discuss course material with the instructor or TAs during office hours.

Please read Piazza's <u>Privacy Policy</u> and <u>Terms of Service</u>, taking time to understand and be comfortable with them. They provide for substantial sharing and disclosure of your personal information held by Piazza, which affects your privacy. If you decide to participate in Piazza, only provide content that you are comfortable sharing under the terms of the Privacy Policy and Terms of Service.

The Piazza system is highly catered to getting you help quickly and efficiently from classmates, the TA, and the lecturers. Rather than emailing questions to the teaching staff, we encourage you to post your questions on Piazza. To sign up for the discussion forum, click on the link: piazza.com/utoronto.ca/summer2019/sta257l0101

TAs are assigned to answer questions you have on Piazza. If you post your questions there and don't get a response in three days, please inform me as soon as possible.

# **Academic integrity**

You are responsible for knowing the content of the University of Toronto's Code of Behaviour on Academic Matters at <u>http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</u>. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact your instructor.

# **Accessibility needs**

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom, or course materials, please contact Accessibility Services as soon as possible: mailto:accessibility.services@utoronto.ca or http://accessibility.utoronto.ca/