STA198H, Fall 2019: Probabilities Everywhere

FINAL ESSAY ASSIGNMENT

Worth: 30% of your final course grade.

Due Date: At 2:10 sharp in class on Wednesday December 4.

E-mail requirement: By 3:00 p.m. on **Monday November 25** (or any time earlier), send a brief e-mail to j.rosenthal@math.toronto.edu, indicating your topic choice and rough plan for your paper.

Class discussion requirement: In class on **Wednesday November 27**, come prepared to discuss your essay topic and ideas and plans with other students. (You should have made significant progress by then.)

The Assignment

You are to write a medium-size paper (6–10 pages typed double-spaced) on a topic which is related to some aspect of the course materials. The main criteria for a successful paper are: It should show that you have thought carefully about the topic; it should <u>add</u> something new to the course (not just repeating what we've already said, not just copying from what we have read or from some other source); it should be interesting; it should be well organised; and it should be well written.

The topic and style of the paper are quite flexible, provided that it is clearly linked to probability/randomness/luck in some important way. It could be mathematical or nonmathematical in nature. It could present a particular opinion or "thesis", or it could present a topic in a balanced or neutral way. It could be written in the first person or not. It might consider how ideas discussed in class apply to some personal or historical or news or fictional event(s); or describe the results of some experiment you perform (e.g. on your friends); or perform critical analysis of class or outside/library readings; or extend and/or explain the mathematical ideas studied in class; etc. Your paper does not have to include all of these aspects, but it should include some of them. Try to be creative.

Notes (continued over):

- 1. The precise formatting of such things as references, footnotes, headings, etc. is up to you, provided that you make your paper easy to read and to follow.
- 2. You may discuss the general ideas of your paper with others, and you may have others proofread your work. But the main ideas and writing of the paper should be done entirely by you.
- **3.** Be sure to indicate what aspects of your paper are based on which references and other sources. The precise *format* of your citations is up to you (as long as it is clear);

what is most important is that you precisely explain which ideas come from which other sources. For guidelines see e.g. the document "How Not to Plagiarize" (linked to at the bottom of the course web page: probability.ca/sta198).

- 4. U of T has lots of writing centres and library assistance to help you research and plan and write your essay; see the links at the bottom of the course web page. You are strongly encouraged to consult these sources for ideas and assistance! It is best if you consult them early, i.e. several weeks <u>before</u> your essay is due.
- 5. If you are having trouble choosing a topic, or planning your essay, or finding the information that you need, then you may ask the instructor for assistance.
- 6. It is intended that students will complete this assignment <u>individually</u>. However, if you wish, with <u>advance permission</u>, it <u>might</u> be possible to work in a group of 2–3 students on a correspondingly larger project; contact the instructor if you are considering this.