DS 1000B (Data Science Concepts)
Section 003
Winter 2022 Course Outline

1. Course information

When deemed necessary, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledging that you will be required to provide personal information (including some biometric data) and that the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca.

2. Course objectives and schedule

By the end of this course, a successful student will be able to:

- Understand and correctly use foundational vocabulary associated with Statistics and Data Science.
- Interpret, create and critically evaluate graphical and numerical data summaries.
- Understand and appreciate probability, chance, randomness, and 'average'.
- Understand, assess, and critique the conclusions of data analyses.
- Apply concepts learned in this course to future courses, careers, and everyday life.

Course schedule: see pages 6 - 8.

3. Communication

- To communicate with the instructor **always use OWL Messages (to Instructor's Role)**.

You can expect a response to a message to the instructor within **approximately 48 hours** during the work week (Monday to Friday).

UWO bookstore listing:
https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2021A&courses%5B0%5D=002_UW/DATASCI1000A

Laboratory tutorials: Python and Jupyter Notebook are the main tools for laboratory tutorials. Instructions on how to install them are available on OWL under Resources.

5. Methods of evaluation

i) Assignments

- **Assignments will be available on the course OWL site. However, you will not submit your solutions to OWL. Instead, assignments must be submitted through Gradescope** (https://www.gradescope.com/) an on-line collaborative grading system. It is your responsibility to make sure that your assignment is successfully uploaded and legible. Submissions that cannot be read by the grader will receive a grade of zero.

- After receiving the grades from an assignment, **students will have seven days to submit any regrade requests on that assignment**. After this seven-day period, regrade requests will NOT be accepted. Regrade requests must be made using the Gradescope tool "Regrade Request".

- **Students must submit at least 2 out of the 3 assignments to write the final exam.**

- **Assignment submissions are due 11:55 pm (Eastern Time) on the due date**. No credit will be given for submissions beyond this time unless a valid academic accommodation is obtained (see Section 6 for details on accommodation).

- Solutions to assignments **will not** be posted; however, TAs will provide comments on wrong answers using Gradescope, which will allow students to find out the correct solutions. In addition, students can ask the instructor and TAs for more details on solutions during office hours.

ii) Midterm and final exams

- There will be a **2-hour closed-book midterm exam to be scheduled by the Registrar's Office scheduling**

- Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information

				- Calculating normal proportions **Assig. 1 due Feb 2**
5	Feb 7-11	4 Sections: 4.1 to 4.6	- Explanatory and response variables - Displaying relationships: scatterplots - Measuring linear	

		13.1 to 13.5	- Independence and the multiplication rule - Conditional probability - Venn diagrams	
12	Mar 28 - Apr 1	15 Sections: 15.3 to 15.6	- Sampling distributions - Mean sampling distribution - Central limit theorem - Statistical	