

DS 1000 (Data Science Concepts)
Section 001
Fall 2022/2023 Course Outline

1. Course Information

Course Information

Instructor	Day/Time	Location	Contact
Holly Steeves	MWF 8:30– 9:30	In-person at SH-3345	Holly.steeves@uwo.ca

Calendar description

Students will learn how to visualize and analyze continuous and categorical data from various domains, using modern data science tools. Concepts of distributions, sampling, estimation, confidence intervals, experimental design, inference, correlation will be introduced in a practical ~~data~~ way.

Prerequisites

One or more of Ontario Secondary School MCV4U, MHF4U, MDM4U, Mathematics 0109A/B, Mathematics 0110A/B, Mathematics 1229A/B, or equivalent.

Anti-requisites

Statistical Sciences 1023A/B, the former Statistical Sciences 1024A/B.

Extra Information

1 hour of laboratory ~~total~~ per week conducted by TAs.

Unless you have either the requisites for this course or writttenformfMeu-2 (eu-iC7-2 (m)-T 7.)JTJ () from a course for failing to have the necessary prerequisites.

2. Instructor Information

Instructors	Email	Office	Phone	Office Hours
Dr. Holly Steeves	Holly.steeves@uwo.ca	WSC 233	519-661-2111 x86426	MF 10:00 – 11:00 T 2:00– 3:00

Students must use their Westen@uwo.ca email addresses when contacting their instructors

You can expect a response to a message to the instructor within approximately 48 hours during the work week (during busy times, it may take a little longer). ***Note that messages will not be answered within the 24-hour period before exams or project deadlines***, nor can I guarantee responses over weekends/holidays.

3. Course Syllabus, Schedule, Delivery Mode

Calendar description

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Course Objectives

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

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		4.1 to 4.6	- Measuring linear correlation (Pearson's correlation coefficient)	- Linear correlation (Python function for Pearson's correlation)
6	Oct 10 14	5 Sections: 5.1, 5.2, 5.4 to 5.8	- Regression lines - Least squares regression lines - Examples of software regression output - Caution about correlation and regression	

Sections:
32.3,
32.4

Technical Requirements

Laboratory tutorials

Python and Jupyter Notebook are the main tools for laboratory tutorials. Instructions on how to install them on your own machine are available on OWL under Resources. If you need access to a computer for coursework, please contact the instructor as early as possible.

- Assignment submissions are due 11:55 pm (Eastern Time) on the due date. Assignments that are up to 24 hours late will receive a deduction of 15% on their mark. Late assignments up to 48 hours will receive a deduction of 30% on their mark. No credit will be given for submissions beyond 48 hours of the deadline time unless a valid academic accommodation is obtained (see Section 7 for details on accommodation).
- Solutions to assignments will not be posted; however, TAs will provide comments on incorrect 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 via the Regrade Request on Gradescope and during office hours.

Midterm and final exams

- There will be a 2-hour in-person closed-book midterm exam, and its time will be scheduled by the Registrar's Office.
- There will be a 3-hour in-person closed-book final exam, and its time will be scheduled by the Registrar's Office.

Rounding of marks

Across the Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. ***Final grades*** on this course, irrespective of the number of decimal places used in marking individual assignments and

