Syllabus

Workshop: Review of basic mathematical and statistical concepts

Instructor: Costin Ciobanu (costin.ciobanu@mail.mcgill.ca)

Course date: Tuesday, August 21 – Friday, August 24, 2018

Course time: 9:00-16:30 Location: Education Building

3700 McTavish Street, Montreal H3A 1Y2

Room 129

Description: This workshop will (re-) introduce you to introductory and intermediate mathematical concepts and increase both mathematical fluency and problem-solving ability, covering basic algebra, calculus, probability theory, and the basics of linear algebra. The goal is to give you some intuition for how you can use some of these mathematical tools in your course work and research. There are no prerequisites and students with more recent mathematical exposure should gain as much as those whose mathematics education ended longer ago.

Detailed schedule:

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Tuesday, August 21, 2018:
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09:00 - 9:30: Session 1: Intro to Workshop

09:30 - 10:00: Break

10:00 – 11:30: Session 2: Basic Rules of Algebra

11.30 – 12:30: Lunch Break

12:30 – 14:00: Session 3: Basic Rules of Algebra, cont'd

Wednesday, August 22, 2018:

09:00 - 10:00: Session 1: Intro to Workshop

10:00 - 10:30: Break

10.30 – 12:00: Session 2: Functions

12.00 – 13:00: Lunch Break

13:00 – 14:30: Session 3: Functions, cont'd

14:30 – 15:00: Break

15:00 – 16:30: Session 4: Limits

Thursday, August 23, 2018:

09:00 - 10:00: Session 1: Derivatives

10:00 – 10:30: Break

10.30 - 12:00: Session 2: Derivatives, cont'd

12.00 – 13:00: Lunch Break

13:00 – 14:30: Session 3: Integrals

14:30 – 15:00: Break

15:00 – 16:30: Session 4: Probability theory

Friday, August 24, 2018:

09:00 - 10:00: Session 1: Linear algebra

10:00 – 10:30: Break

10.30 - 12:00: Session 2: Linear algebra, cont'd

12.00 – 13:00: Lunch Break

13:00 - 14:30: Session 3: Linear algebra, cont'd

14:30 – 15:00: Break

15:00 – 16:00: Session 4: Linear algebra, cont'd; Workshop Wrap-Up.