

## SAMPLE COURSE OUTLINE

Creation date: Jan 23, 2020

Revision date: Jan 23, 2020

### Course Code, Number, and Title:

MATH 4801: Mathematics for Data Analysis

### Course Format:

[Course format may vary by instructor. The typical course format would be:]

2.0 hours self-paced study

**Credits:** 1

**Transfer Credit:** For information, visit [bctransferguide.ca](http://bctransferguide.ca)

### Course Description, Prerequisites, Corequisites:

Intended for students who require additional practice in pre-calculus algebra and linear algebra to succeed in Data Analytics programs. Topics include linear equations, systems of equations, matrix operations, quadratic forms, power functions, square root functions, exponential functions, logarithmic function, and reciprocal functions. Students with a passing score on the Data Analytics Mathematics Assessment (DAMA) Test are not required to complete this course.

**Prerequisite(s):** A failing score on the Data Analytics Mathematics Assessment (DAMA). Students must take this test in order to register in this course.

### Learning Outcomes:

Upon successful completion of this course, the student should be able to:

- Identify the slope and intercepts of a straight line and sketch its graph
- Solve a system of linear equations using the methods of substitution and elimination
- Perform addition, subtraction, and multiplication of two matrices
- Find inverse, trace, eigenvalues, eigenvectors, and quadratic form of a square matrix if they exist
- Identify the domains and ranges of power, reciprocal, and square root functions, and use them to depict the relationship between two variables
- Identify the domain and range of exponential function, and use it to depict the relationship between two variables; use it to form the logistic function to model the relationship between two variables
- Identify the domain and range of logarithmic function, and use it to depict the relationship between two variables
- Solve simple exponential and logarithmic equations

**Instructor(s):** TBA

**Office:** TBA

**Phone:** (604) 323-XXXX

**Email:** TBA

"This generic outline is for planning purposes only".

**Office Hours: TBA****Textbook and Course Materials:**

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

*Information unavailable, please consult Department for details*

For textbook information, visit [https://mycampusstore.langara.bc.ca/buy\\_courselisting.asp?selTerm=3|8](https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8)

Note: *This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.*

**Assessments and Weighting:**

Note: Students have to do all chapter tests and get at least 80% in each chapter test in order to pass the course.

Note: No Final Examination in this course

**Grading System:**

Specific grading schemes will be detailed in each course section outline.

Pass/Fail

**Topics Covered:**

[Topics covered may vary by instructor. An example of topics covered might be:]

*Information unavailable, please consult Department for details*

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

**College Policies:**

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

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**Departmental/Course Policies:**

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