

AIDI 1003: MACHINE LEARNING FRAMEWORKS

Course outlines are reviewed annually as part of continual quality improvement. This course was last updated for the effective term below.

Effective Term

Winter 2021

Full Course Title

Machine Learning Frameworks

Academic Level

Post Graduate

Subject Code

AIDI - PG Artificial Intelligence

Course Number

1003

Grade Mode

Numeric

PLAR Applicable

Yes

Total Hours

42

Course Description

Machine learning frameworks help accelerate the creation of Artificial Intelligence (AI) systems by utilizing an established set of algorithms, libraries and models specifically designed for machine learning systems. Students gain experience working with an AI framework by learning how to prepare and load the data, prepare a model, train and test the model to perform supervised and unsupervised learning.

Course Content

- Framework installation
- Loading a dataset
- Model creation
- Model training and testing
- Classification
- Autoencoders

Course Evaluation

The passing grade for this course is 60%, evaluation is comprised of:

- Assignments 60%
- Test(s) 40%

Tests/examinations/assignments must be written/submitted at the time specified. Requests for adjustments to that schedule must be made before the test/exam/assignment date to the faculty member. Failure to do so will result in a mark of "0", unless an illness/emergency can be proven with appropriate documentation at no cost to the College.

Academic Appeal

Students at Georgian College can appeal the following:

- A mark on an assignment, test, examination or work-integrated learning term
- Missing or incorrect assessment information on a grade report and/or transcript
- A charge of academic misconduct

Note: Students cannot appeal a final grade. It is the academic work that is appealable leading to the final grade i.e. final test, exam or assignment.

Refer to Academic Regulations 9.2 Academic Appeal for further details.

To graduate from graduate certificate level programs, a student must attain a minimum of 60% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester. The passing weighted average for promotion through each semester and to graduate is 60%.

Course Learning Outcomes

Upon successful completion of this course, the student has reliably demonstrated the ability to:

1. install a Machine Learning (ML) framework;

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

2. load a data set into a ML framework;

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

3. create, train and test a data model for a machine learning framework;

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

4. use a machine learning framework to classify objects;

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

5. apply the concepts of unsupervised learning to perform cluster analysis.

Evaluation

Introduced
Assessed

Key: 30158