1. Course Information

Course number: FIMS 9730

Course name: Data Science for Information Professionals

Location: FIMS & Nursing Building 2230

Time: Fridays 1:30 – 4:20 p.m.

2. Instructor Information

Name: Isola Ajiferuke

Office: FIMS & Nursing Building 4025

Phone: (519)661-2111, ext. 81364

E-mail: <u>iajiferu@uwo.ca</u>

3. Course Description

Data types: little vs big, and structured vs unstructured. Data science process: collect data, transform and clean data, analyze data, visualize and communicate data. Data science tools. Data visualization. Predictive analytics. Text and data mining. Clustering and social network analysis. Privacy, security, and ethics in data science.

We will be using R and RStudio through MyVlab (http://myvlab.uwo.ca/) for analyzing data.

4. Course Materials

Recommended Textbooks: -

- Saltz, J.S. and Stanton, J.M. (2018). An introduction to data science. Los Angeles, CA: Sage.
- Shah, C. (2020). **A hands-on introduction to data science**. New York, NY: Cambridge University Press.
- Stuart, David (2020). **Practical data science for information professionals**. London: Facet.
- Zumel, N. and Mount, J (2020). **Practical data science with R.** 2nd edition. Shelter Island, NY: Manning Publications Co.

5. Methods of Evaluation

- (a) Data cleaning/preparation (10%) (February 2024)
- (b) Predictive analytics (25%) (March 2024)
- (c) Data mining (25%) (March 2024)
- (d) Text mining (30%) (April 2024)
- (e) Class participation (10%)

6. Enrollment Restrictions

Enrollment in this course is restricted to graduate students in the Faculty of Information and Media Studies, as well any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student's home program.

7. Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

8. Health/Wellness Services

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.

9. Accessible Education Western (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are encouraged to register with Student Accessibility Services, a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both SAS and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.