

## Learning Plan 2017-18

**Course Name:** Analytical Software Applications

**Course Code:** COMP 5003

**Program(s):** Business Analytics

**Delivery Method:** Face to Face ☒ Hybrid ☐ Online ☐

**Prepared by:** Zhe Yang

**Contact Information:** [ZYang@sl.on.ca](mailto:ZYang@sl.on.ca)

**Campus Dean/Associate Dean Signature of Approval:**



**Date approved:** 5/8/2018

**for the semester of:** Fall ☐ Winter ☐ Spring ☐ Summer ☒

### Assessment Plan

Students will demonstrate learning in the following ways:

Assessment Type	CLO*	VLO**	Description (e.g. Frequency, details)	Tentative Due Dates	% Of Grade	Total %
Assignments	1,2,3,4	1,2,3,4,5,6	Take home assignments to be submitted on expected due dates	Week 1, Week 5, Week 10	15%	45%
Computer Test	1,2,3,4	1,2,3,4,5,6	MidTerm	Week 7	15%	15%
Group Project	1,2,3,4	1,2,3,4,5,6	Project undertaken in teams to be presented in a final, written report and to class.	Week 15	40%	40%

\*CLO: Course Learning Outcome \*\*VLO: Vocational Learning Outcome

### Program Specific Continuance Policy

#### Continuance Policy for The School of Business

This policy applies to the following academic programs within the School of Business:

Advertising & Marketing Communications

Advertising & Marketing Communications Management

Business

Business Administration

Business Analytics

Business - Accounting

Business Administration — Accounting

Business — Human Resources  
Business Administration — Human Resources  
Business Administration - Fast Track — Human Resources  
Business — Marketing  
Business Administration — Marketing  
Interactive Marketing Communications  
Health Care Administration  
Office Administration  
Office Administration — Health Services  
Office Administration — Legal  
Office Administration — Medical/Legal  
Law Clerk  
Logistics and Supply Chain Management

Students in the School of Business must be in good academic standing to continue within their program of study.

To be in good Academic Standing, students in a normal course load must

- Maintain a semester GPA of 1.5 or higher
- Have not failed more than 2 courses
- Have successfully completed a minimum of 4 courses
- Students studying part time will have their records reviewed upon completion of 270 course hours of course work.

Students not maintaining good academic standing will be placed on Academic Probation. Academic probation requires a student to take a normal full time course load:

- maintain a semester GPA of 1.5
- Students do not fail any courses
- Students studying part time will have their academic probation apply for three semesters or a minimum of 4 courses
- Students not able to meet the conditions of Academic probation will be placed on Academic Suspension

Students will be placed on Academic suspension if they:

- Fail to be in good academic standing for 2 consecutive semesters
- Receive a failing grade for the same course twice

Academic suspension requires that a student be withdrawn from their program of study for one calendar year. To be re-admitted to their program of study students need to re-apply to the program and provide documentation that demonstrates their commitment to maintaining good academic standing. Re-application decisions are made by the registrar's office. Students on academic suspension are not allowed to enroll in any courses in the School of Business offered as part of the programs listed above. Students are eligible to enroll in courses through Continuing Education.

#### Academic Withdrawal

Students who have been academically suspended twice will be academically withdrawn. Academic withdrawal prevents students from enrolling in any program within the College. Academic withdrawal decisions will be made by the Registrar's office.

College Academic Policy stipulates that students must pass 2/3 of their courses or 70% of their course hours in order to continue as a full time student.

## College Continuance Policy

College Academic Policy stipulates that students must pass 2/3 of their courses or 70% of their course hours in order to continue as a full time student.

### Required Texts, Materials, Resources or Technical Materials Required

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Galit Shmueli, Peter C. Bruce, Nitin R. Patel, Inbal Yahav, Kenneth C. Lichtendahl Jr. Data Mining For Business Analytics. Concepts, Techniques, and Applications in R, 1<sup>st</sup> Edition, 2017</li><li>2. Lecture Notes, Tableau, Knime Software, Spotfire, Power BI</li></ol> |
|---|

### 2017-18 College Academic Policy: Attendance and Participation

#### 6.1 Attendance

Attendance refers to presence in scheduled classes. It is not tied to evaluation of learning outcomes and shall not be used in calculation of final grades. Taking attendance is at the discretion of the faculty. Any requirements for attendance shall be written in the course outline and clearly explained to students. When attendance is taken, these records may be used to determine eligibility for re-writes, supplemental tests/assignments, field placement or to identify students at risk. If attendance is used to determine eligibility for rewrites, supplemental tests/assignments, or field placement, the minimum required attendance standard shall be stipulated in the course outline and clearly explained to students.

Some programs are subject to attendance policies of external institutions or regulatory bodies which may supersede St. Lawrence College policy. In such cases, the governing policy pertaining to attendance shall be written in the course outlines and clearly explained to students. When compulsory attendance recording is required by a sponsoring agency, it is the student's responsibility to collect confirmation of attendance from professors.

#### 6.2 Participation

Participation refers to student engagement in learning activity tasks that contribute to the achievement of stipulated learning outcomes. Participation may be assessed, and may contribute to final evaluation. If participation is used as an assessment strategy, the participation criteria must be objective and measureable. The expected participation elements and the method of evaluating the stated elements shall be written in the course outline and clearly explained to students.

#### 6.3 Labs/Field Placement/Clinical Practice Participation

Each program will establish policy and procedures related to participation in labs, field placements, and clinical practice. Penalties for nonparticipation shall be clearly stipulated. These policies and procedures shall be written in all applicable course outlines, and clearly explained to students.

The College supports the principle of reasonable accommodation and makes all reasonable efforts to meet the disability related placement needs of its students. In collaboration with the academic schools, Accessibility Services will play a leadership role in instituting practices that respect each student's dignity,

inclusion opportunities and independence. The college strives to eliminate attitudinal, academic, and physical barriers that hinder the placement success of students with disabilities.

Source: 2017-18 Academic Policy Manual

### Special Notes for this Course

#### **Assignments**

Problems will be assigned periodically during the term. All assignments will be collected on their due date for grading. Students must notify the instructor by email before the start of class or tests (any type) in order to request the opportunity to submit late assignments or to be eligible for the test. It is the responsibility of the student to contact the instructor by email within 24 hours to set up an appointment to discuss options.

#### **Laptops**

It is highly recommended that students bring their personal Laptops to class to make it easier for them to review assignments and projects with their groups.

## Learning Plan Delivery Schedule

Initials of Campus/Associate Dean:  Date: 5/8/2018

**Please Note:** Any changes to this delivery schedule will be communicated in writing by the professor to the students.

Week	Topic	Key Learning Objectives	Learning Activities	Resources & References
Weeks 1 -3	Introduction to Tableau and Data Visualization	<ul style="list-style-type: none"> <li>- Explain how to use Tableau to visualize data</li> <li>- Build simple analytical models with Tableau</li> <li>- Implement Geo-mapping in Tableau</li> </ul>	<ul style="list-style-type: none"> <li>- Guided lecture notes</li> <li>- Small and Large Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>-Lecture Notes</li> <li>-Tableau Software</li> </ul>
Weeks 4 -6	Data analytics with Tableau  Social Media Analytics with Tableau	<ul style="list-style-type: none"> <li>-Build data analytics models in Tableau</li> <li>- Build Social Media Analytics models in Tableau</li> </ul>	<ul style="list-style-type: none"> <li>- Guided lecture notes</li> <li>- Small and Large Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>-Lecture Notes</li> <li>-Tableau Software</li> </ul>
Week 7	<b>Reading Week</b>			
Week 8	<b>Mid-Term(in class or take home)</b>			
Weeks 9 -11	Overview of Knime	<ul style="list-style-type: none"> <li>- Explain how to use Knime for data visualization and quick analysis</li> <li>- Build data analytics models in Knime</li> </ul>	<ul style="list-style-type: none"> <li>- Guided lecture notes</li> <li>- Small and Large Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>-Lecture Notes</li> <li>-Knime Software</li> </ul>
Weeks 12 -14	Artificial Intelligence – Machine Learning  Power BI and Spotfire	<ul style="list-style-type: none"> <li>- Describe Neural Networks</li> <li>- Build Deep Learning models in Knime</li> <li>- Implement Machine Learning Algorithm to solve simple problem</li> </ul>	<ul style="list-style-type: none"> <li>- Guided lecture notes</li> <li>- Small and Large Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>-Lecture Notes</li> <li>-Knime Software</li> <li>-Data Mining For Business Analytics. Concepts, Techniques, and</li> </ul>

Week	Topic	Key Learning Objectives	Learning Activities	Resources & References
		- Build dashboards with Power BI and Spotfire		Applications with R (Chapter 11)
Week 15	Final Project Submission and Presentation			