

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> BUS 424		<b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>																	
<b>Course Full Title:</b> Customer Intelligence <b>Course Short Title (if title exceeds 30 characters):</b>																			
<b>Faculty:</b> Faculty of Professional Studies		<b>Department (or program if no department):</b> School of Business																	
<b>Calendar Description:</b> To be competitive, marketing executives need to make their decisions based on data. This course gives marketing students the skills necessary to analyze marketing problems using data analytics, to make evidence-based management decisions.																			
<b>Prerequisites (or NONE):</b>		60 university-level credits including BUS 320.																	
<b>Corequisites (if applicable, or NONE):</b>		None																	
<b>Pre/corequisites (if applicable, or NONE):</b>		None																	
<b>Equivalent Courses (cannot be taken for additional credit)</b> Former course code/number: <b>BUS 470, BUS 390I</b> Cross-listed with: Equivalent course(s): <b>BUS 470, BUS 390I</b> <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>		<b>Transfer Credit</b> Transfer credit already exists: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Transfer credit requested (OREg to submit to BCCAT): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No To find out how this course transfers, see <a href="http://bctransferguide.ca">bctransferguide.ca</a> .																	
<b>Total Hours: 45</b> <b>Typical structure of instructional hours:</b> <table border="1"> <tr><td>Lecture hours</td><td>5</td></tr> <tr><td>Seminars/tutorials/workshops</td><td>20</td></tr> <tr><td>Laboratory hours</td><td>20</td></tr> <tr><td>Field experience hours</td><td></td></tr> <tr><td>Experiential (practicum, internship, etc.)</td><td></td></tr> <tr><td>Online learning activities</td><td></td></tr> <tr><td>Other contact hours:</td><td></td></tr> <tr><td><b>Total</b></td><td><b>45</b></td></tr> </table>		Lecture hours	5	Seminars/tutorials/workshops	20	Laboratory hours	20	Field experience hours		Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours:		<b>Total</b>	<b>45</b>	<b>Special Topics</b> Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>	
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<b>Total</b>	<b>45</b>																		
		<b>Maximum enrolment (for information only): 25</b> <b>Expected frequency of course offerings (every semester, annually, every other year, etc.):</b> Annually																	
<b>Department / Program Head or Director:</b> Dr. Frank Ulbrich		<b>Date approved:</b> October 31, 2017																	
<b>Faculty Council approval</b>		<b>Date approved:</b> December 8, 2017																	
<b>Campus-Wide Consultation (CWC)</b>		<b>Date of posting:</b> February 16, 2018																	
<b>Dean/Associate VP:</b> Dr. Tracy Ryder Glass		<b>Date approved:</b> December 8, 2017																	
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> February 23, 2018																	

**Learning Outcomes**

Upon successful completion of this course, students will be able to:

- LO1. Demonstrate how customer analytics can enhance business decision-making by converting customer data to meaningful insights,  
 LO2. Combine marketing and analytical knowledge to drive decisions and actions,  
 LO3. Identify which analytical method to use for a given business problem, and what data is required to address the problem,  
 LO4. Use a wide variety of analytics techniques such as pattern discovery and predictive modelling in data mining,  
 LO5. Evaluate model performances using graphical and numerical methods,  
 LO6. Apply industry standard analytical tools for data modeling and data mining in a customer analytics project.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes ☐ No, PLAR cannot be awarded for this course because:

**Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)**

Lectures, seminars, and labs.

**Grading system:** Letter Grades: ☒ Credit/No Credit: ☐ Labs to be scheduled independent of lecture hours: Yes ☐ No ☒

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)**

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Tan, P-N., Kumar, V., & Steinbach, M.	Introduction to Data Mining	<input checked="" type="checkbox"/>	Addison-Wesley	
2. SAS Institute Inc.	Applied Analytics Using SAS Enterprise Miner Course Notes	<input checked="" type="checkbox"/>	SAS Books	

**Required Additional Supplies and Materials (software, hardware, tools, specialized clothing, etc.)**

Microsoft Office.

**Typical Evaluation Methods and Weighting**

Final exam:	-	Assignments:	25%	Midterm exam:	-	Practicum:	-
Quizzes/tests:	25%	Lab work:	-	Field experience:	-	Shop Work:	-
In-class cases:	10%	Term project:	30%	Presentation:	10%	Total:	100%

**Details (if necessary):****Typical Course Content and Topics**

## Module One:

- Introduction to predictive modeling
- Accessing, preparing, and exploring data
- Class participation (LO 1–3)
- Quiz #1 (LO 1–3)
- Assignment #1 (LO 3)
- Mini-presentation #1 (LO 3)

## Module Two:

- Decision trees
- Regression models
- Neural networks
- Class participation (LO 3, 4)
- Quiz #2–4 (LO 4)
- Assignment #2–4 (LO 4)
- Mini-presentation #2–4 (LO 4)

## Module Three:

- Pattern discovery (market-basket, sequence, and cluster analysis)
- Dimensionality reduction
- Class participation (LO 4)

## Module Four:

- Model assessment and implementation
- Class participation (LO 5)
- Quiz #5 (LO 5)
- Assignment #5 (LO 5)
- Mini-presentation #5 (LO 5)

Data mining term project (LO 1–6)

Term project report and presentation (LO 1–6)

Class participation (LO 1–6)