TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO 264 BUSINESS ANALYTICS

Trimester 2, 2016

COURSE OUTLINE

Prescription

Covers the techniques of collecting, organising and analysing historic data to improve business processes and predict customer behaviour. Uses analytical software for data mining, decision support, supply chain management, simulation, and optimisation.

Course Learning Objectives

Learning objectives	By the end of this course, students should be able to:	Graduate Attributes	Major Attributes
1	Apply basic principles of data mining and web mining	LG1 LG2 LG4 LG5	MA3 MA4
2	Implement key components of online analytic processing	LG1 LG2 LG5	MA3
3	Plan, organise and evaluate methods to prepare raw data for business analytics	LG1 LG4 LG5	MA3
4	Apply analytics on BI Software to answer business questions	LG1 LG5	MA6

Course Content

This course will provide students with an introduction to business analytics. Topics include enterprise database implementation, data warehouse design, ETL process, OLAP query extension, predictive analytics and data mining.

Week	Date	Topic	Workshop	Readings	Due
1	12 July	Introduction to Analytics		Maheshwari Ch 1	
2	19 July	Introduction to Business Intelligence	Workshop 1	Maheshwari Ch 2	Case Exercise Step 1 (25 July)
3	26 July	Data Warehousing and Data Modeling	Workshop 2	Maheshwari Ch 3 and 15	Case Exercise Step 2 (1 August)
4	2 August	Data Mining		Maheshwari Ch 4	Case Exercise Step 3 (8 August)
5	9 August	Data Visualization	Workshop 3	Maheshwari Ch 5	Case Exercise Step 4 (15 August)
6	16 August	Decision Trees and Neural Networks		Maheshwari Ch 6 and 8	Case Exercise Step 5 (5 September)
7	6 September	Regression	Workshop 4	Maheshwari Ch 7	Case Exercise Step 6 (12 September)
8	13 September	Cluster Analysis		Maheshwari Ch 9	Case Exercise Step 7 (19 September)

Week	Date	Topic	Workshop	Readings	Due
9	20 September	Association Rule Mining	Workshop 5	Maheshwari Ch 10	Case Exercise Step 8 (26 September)
10	27 September	Text Mining and Data Mining		Maheshwari Ch 11 and 12	
11	4 October	Social Networks	Workshop 6	Maheshwari Ch 13	
12	11 October	Big Data		Maheshwari Ch 14	
14	25 October				Final Project

Trimester Dates

From Monday 11th July to Tuesday 25th October 2016.

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 22nd July 2016.
2. The standard last date for withdrawal from this course is Friday 23rd September 2016. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an '*Application for Associate Dean's Permission to Withdraw Late'* including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks or online.

Names and Contact Details

	Staff	Contact Details	Room	Office Hours
Course Coordinator & Lecturer	Jennifer Campbell-Meier	jennifer.campbell-meier@vuw.ac.nz 04 463-3549	RWW 206	Tuesday 11am-12pm by appointment
SIM Undergraduate Support Team	Anette Klaassen Duncan Inkster	simstudents@vuw.ac.nz 04 463 6998	RH 521	Mon-Fri 10am-4pm or by appointment

Class Times and Room Numbers

Tuesdays 8:30–10:30 am in Rutherford House (RHLT2)

Tutorial/Workshop Signups

Sign up via myAllocator https://student-sa.victoria.ac.nz/

Course Delivery

Students are expected to complete the assignments in order to understand the concepts and theories taught during lectures. Students should also prepare for the workshop prior to their allocated time. Students are ***expected to have a mobile device during lecture.***

Readings

The following textbook (ebook) is required and can be purchased online from Amazon: https://www.amazon.com.au/Data-Analytics-Made-Accessible-Maheshwari-ebook/dp/B00K2I2JL8/ref=sr_1_1?ie=UTF8&qid=1465785619&sr=8-1&keywords=data+analytics+made+accessible

Maheshwari, A. (2014). Data Analytics Made Accessible.

Additional readings will be available in Talis via Blackboard.

IIAB Membership

It is highly recommended that students join the International Institute of Business Analytics (IIAB). As the school is an academic member of IIBA a reduced rate of NZ$74 is available to you – refer to Blackboard for instructions. Students who took INFO 141 last year may be members already – refer to the instructions on Blackboard.

Expected Workload

In terms of weekly course workload, expect to spend two hours in each lecture, two hours in each workshop and about eight to eleven hours working on your own per week in preparation for lectures, workshops, case notes, and the final project.

Assessment

The Assessment Handbook will apply to all VUW courses: see http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

Assessment Item	Description	Learning Objectives	Weight
8 Case Exercises: Application of analytics concepts from the reading. Weekly as noted. (25 July, 1 August, 8 August, 15 August, 5 September, 12 September, 19 September, 26 September)	The exercises correspond to a case within the text. Students answer questions related to the course content based on given scenarios.	1,2,4	30% (8 x 3.75%)
6 Workshops: Workshop task demonstration and discussion Weeks 2,3,5,7,9, and 11	Exhibit competency with tools and techniques introduced in workshops	1,2,3,4	30% (6 x 5%)
Final Project	All aspects of the course. Students will develop a report for a manager employing the appropriate analytic tools and visualizations	1,2,3,4	30%
Lecture Activities**:** **In class exercises** developed to review lecture content and aid discussion	Exhibit competency with content introduced in lecture.	1,2,3	10% (12 x .833%)

If you cannot complete an assignment or sit a test or examination, refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

Penalties
The penalty for late submission of work without a prior extension arrangement is a reduction of 10% of the available marks each calendar day, starting from the due date and time, up to 5 days after the due date. At the course coordinator's discretion, work handed in after 5 days may be assessed and feedback provided, but no grade will be assigned.

Extensions
Personal extensions are granted only in special circumstances and supporting evidence such as a medical certificate may be requested by the course coordinator or SIM undergraduate support team. Requests for an extension should be emailed to simstudents@vuw.ac.nz

Non-extendable assessments. For some work, such as: lab projects, case discussion preparation, and tutorial preparation there is no possibility of late submission as the opportunity for the work to be completed has already passed.

Use of Turnitin
Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine http://www.turnitin.com. Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and submitted to Turnitin. A copy of submitted materials will be retained on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

Materials and Equipment
Students are ***expected to have the following*** for each computer workshop:
- A computer account by the first week of the term
- A storage device to save all work

Student feedback
The course lecturer and text are new for 2016. Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback_display.php.

Class Representative
A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the course coordinator and the class. The class representative provides a communication channel to liaise with the course coordinator on behalf of students.

Communication of Additional Information
Additional information on changes will be conveyed via Blackboard.

Link to general information
For general information about course-related matters, go to
http://www.victoria.ac.nz/vbs/studenthelp/general-course-information

Note to Students
Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

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