

### COURSE INFORMATION

Course title:	Analytics Leadership	Credits:	1.5
Course code:	BAMS 521	Class location:	DL 009
Session, term, period:	2023W2, Period 5		Note: see exceptions at the bottom of the syllabus and on Canvas
Section(s):	BA1 and BA2	Class times:	M/T/W/R/F 10am-12pm (BA 1) 2pm-4pm (BA 2) Note: see exceptions at the bottom of the syllabus and on Canvas
Course duration:	Apr 15 to Apr 26, 2023	Pre-requisites:	n/a
Division:	Operations and Logistics	Co-requisites:	n/a
Program:	MBAN		

### INSTRUCTOR INFORMATION

Instructor:	Harish Krishnan	Office location:	HA 467
Phone:	604-822-8394	Office hours:	Everyday 12:00pm-1:00pm
Email:	<a href="mailto:harish.krishnan@sauder.ubc.ca">harish.krishnan@sauder.ubc.ca</a>		

### COURSE DESCRIPTION

Advanced analytical skills are necessary but not sufficient for the successful application of analytics to solve problems and create value for business and organizations. For analytics to have impact, practitioners need to collaborate with other stakeholders throughout the process of moving from the motivating issue (a business problem), to the analysis and, finally, to execution and deployment. This process of moving from the initial problem, to generating insights, to effecting change is fraught with challenges and pitfalls. This course will engage students in a discussion of issues related to these challenges. This will include a discussion of project management principles (including agile concepts), the consulting approach to problem solving, and the broader role of leadership in analytical projects.

### COURSE FORMAT

The course will include lectures, case discussions, in-class case activities and simulations. Please see detailed course schedule below.

### LEARNING OBJECTIVES

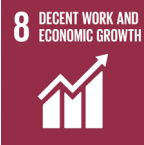


Upon completion of the course, students will be able to:

- Recognize opportunities where organizations can apply advanced analytics to improve performance and define the business benefits of analytics projects
- Identify the challenges posed by messy, unstructured problems, organizational barriers and non-technical decision makers
- Identify the sources of organization resistance to change and be deal to with it in the context of implementing analytics projects

- Identify the underlying business problem that advanced analytical techniques need to address
- Formulate a business problem as an analytics problem
- Create analytics project plans and evaluate these plans
- Apply basic project management tools and concepts, including agile methods
- Assess common challenges in analytics projects and be able to deal with common challenges
- Assess the ethical issues advanced analytics professionals face
- Prepare business presentations and documents (including outlining assumptions, limitations and constraints) and communicate findings effectively

**SUSTAINABLE DEVELOPMENT GOALS (SDGS)**

At UBC Sauder, we are committed to responsible business practices that can have transformative impacts on society. One of the ways we are reinforcing our commitment to responsible business is by showcasing relevant content in our courses via the lens of the [United Nations Sustainable Development Goals](#). In this course, we will touch on topics that relate to the following goals:

<p><b>Goal 8: Decent Work and Economic Growth</b></p> 	<p>Throughout the course, we will explore the role of how analytics tools can be made more effective to support organizations, workers and other stakeholders in achieving their goals.</p>
<p><b>Goal 9: Industry, Innovation and Infrastructure</b></p> 	<p>We will emphasize the role of project management in making large initiatives, including data-driven ones, to be more effective for all stakeholders.</p>
<p><b>Goal 12: Responsible Consumption and Production</b></p> 	<p>We will explore ways that analytics applications can be made more effective for all stakeholders.</p>

**ASSESSMENTS**

*Summary*

<u>Component</u>	<u>Weight</u>
Project management simulation (Individual)	10%
Individual assignments	20%
Group assignments and presentations	50%
Class participation	20%
Total	100%

### *Details of Assessments*

#### **Group assignment and presentation details:**

- Will be provided on the course website.

#### **Individual assignment details:**

- Will be provided on the course website.

#### **Assignment submission details:**

- Will be provided on the course website.

#### **Other details about assignments:**

- Students are free to *discuss* the individual assignments with each other, but each student must complete and submit the assignments individually.

#### **Final Exam:**

There is no final exam for this course.

#### **Class Participation:**

Please be ready and willing to actively engage in all aspects of the classroom learning experience.

We all have something to contribute to the collective learning experience each day, and we all want to benefit from it.

### LEARNING MATERIALS

Required:

1. Syllabus.
2. Coursepack: please see details on course website.
3. Class notes (will be posted on course website: access via <http://canvas.ubc.ca>).
4. Links to some required (and some recommended) readings will be posted on the course website.
5. Other materials will be specified as needed.

Recommended:

6. Book: Cracked it!: How to solve big problems and sell solutions like top strategy consultants, 2018 by Bernard Garrette, Corey Phelps, Olivier Sibony (available on library reading list; on Canvas)
7. Book: Why AI/Data Science Projects Fail: How to avoid project pitfalls, 2022 by Joyce Weiner (available on library reading list; on Canvas)
8. Book: The Phoenix Project: A Novel about IT, DevOps, and Helping Your Business Win, 2013 by Gene Kim, Kevin Behr, George Spafford

### COURSE-SPECIFIC POLICIES AND RESOURCES

#### *Missed or late assignments, and regrading of assessments*

Late submissions will not be accepted and will receive a grade of zero.

#### *Academic Concessions*

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an [Academic Concession Request & Declaration Form](#)

<https://webforms.sauder.ubc.ca/academic-concession-rhlee>. If an academic concession is granted during the course, the student will be provided options by RHL, or by the instructor in consultation with RHL, per [UBC's policy on Academic Concession](#).

### POLICIES APPLICABLE TO COURSES IN THE ROBERT H. LEE GRADUATE SCHOOL

#### *Attendance*

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause

unnecessary disruption to the learning environment. Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a “W” or an “F” standing on the transcript.

#### *Punctuality*

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

#### *Electronic Devices*

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School’s policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students’ use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

#### *Citation Style*

Please use the American Psychological Association (APA) reference style to cite your sources.

Details of the above policies and other RHL Policies are available at:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625>

### UNIVERSITY POLICIES AND RESOURCES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website at <https://senate.ubc.ca/policies-resources-support-student-success>.

#### *Academic Integrity*

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President’s Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

#### *Use of Artificial Intelligence*

#### **Generative AI (Including ChatGPT) Not Permitted**

Any work submitted must be your own original work, written without outside assistance or collaboration. Any use of generative artificial intelligence (AI), including ChatGPT, is not permitted and

constitutes academic misconduct. Any student suspected of submitting work that includes AI generated content may be asked for preliminary work or other materials to evidence the student's original and unaided authorship. The student may also be asked to separately explain or support their work. AI identification methods may also be employed by the instructor. After review, if it is determined by the instructor that submitted work likely contains AI generated content, the work may receive a zero and may be subject to further misconduct measures set out in the [UBC Academic Calendar](#).

### COPYRIGHT

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. Audio or video recording of classes are not permitted without the prior approval of the Instructor.]

### ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

#### *Respect for Equity, Diversity, and Inclusion*

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Metis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others. This course might be taught using Zoom for synchronous classes and office hours.

For this course, you might be required to use a Zoom account during synchronous classes and office hours. If you do not have a Zoom account, you can create one here: <https://zoom.us/signup>. Note: creating a Zoom account requires that you provide a first name, last name, and email address to Zoom. For privacy purposes, you may consent to using your existing email address and your real name.

Alternatively, if you prefer, you may sign up using an alternative email address and an anonymized name that does not identify you (i.e. Jane Doe, [jane.doe@email.com](mailto:jane.doe@email.com)). If you have trouble creating an account, or accessing a Zoom session, please contact [CLCHelp@sauder.ubc.ca](mailto:CLCHelp@sauder.ubc.ca). You will be required to provide the email address associated with your Zoom account in a Canvas quiz for identification purposes. To help replicate the classroom experience, make sessions more dynamic and hold each person accountable, both students and instructors are required to have their cameras on during Zoom sessions. Students who require an accommodation with regard to the "camera on" requirement must contact their instructors in advance of the first class to discuss options. As professional graduate students, students are expected to conduct themselves professionally by joining sessions on time, muting mics when not speaking, refraining from using any other technology when in-session, attending in business casual dress (at a minimum), and participating from a quiet environment. Content from synchronous sessions will be selectively recorded per instructor discretion and made available to students on Canvas for a maximum duration of the course length. This is done to allow students the opportunity to return to lecture content to solidify learnings.

**COURSE SCHEDULE**

(Subject to change with class consultation)

Week	Date	Topic	Readings (CM = Canvas Modules CP = Coursepack L = Library link Canvas)	Assignment Due
1	Apr 15	<ul style="list-style-type: none"> <li>• Course overview</li> </ul>		
		<ul style="list-style-type: none"> <li>• Class discussion                             <ul style="list-style-type: none"> <li>○ How to ensure that analytics adds value?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Reading 1: Why do most data analytics projects fail? (L)</li> </ul>	
		<ul style="list-style-type: none"> <li>• Class discussion                             <ul style="list-style-type: none"> <li>○ How to effectively integrate analytics into an organization?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Reading 2: Integrating Analytics in Your Organization: Lessons From the Sports Industry (L)</li> </ul>	
	Apr 16 (both sections meet jointly at 10am in HA 132)	<ul style="list-style-type: none"> <li>• Guest lecture: Leon Zhu and Anshul Chopra                             <ul style="list-style-type: none"> <li>○ Integrating Analytics in the Forest Products Industry</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Reading and <u>individual</u> response 1 and 2 (see Canvas for details)</li> </ul>
		<ul style="list-style-type: none"> <li>• Case preparation (in class): Data Science at Target</li> </ul>	<ul style="list-style-type: none"> <li>• Data Science at Target (CP)</li> </ul>	
	Apr 17	<ul style="list-style-type: none"> <li>• Aligning analytics to the business problem case discussion: Data Science at Target</li> </ul>		<ul style="list-style-type: none"> <li>• Data Science at Target <u>group</u> submission (see Canvas for details)</li> </ul>
		<ul style="list-style-type: none"> <li>• Project management                             <ul style="list-style-type: none"> <li>○ Project valuation and selection</li> <li>○ Project initiation</li> <li>○ Class activity (on project charter)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Class notes</li> <li>• A Project Management Methodology (use as reference) (CP)</li> </ul>	
	Apr 18	<ul style="list-style-type: none"> <li>• Project management                             <ul style="list-style-type: none"> <li>○ Project planning and scheduling</li> </ul> </li> </ul>		
		<ul style="list-style-type: none"> <li>• In class case: Echelon Release</li> </ul>	<ul style="list-style-type: none"> <li>• Echelon Release (CM)</li> </ul>	
	Apr 19	<ul style="list-style-type: none"> <li>• Project management                             <ul style="list-style-type: none"> <li>○ Project control and monitoring</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Project management <u>individual</u> homework (see Canvas for details)</li> </ul>
<ul style="list-style-type: none"> <li>• Project Management Simulation (start in class)</li> </ul>				

2	Apr 22 (both sections meet jointly at 10am in HA 132)	<ul style="list-style-type: none"> <li>• Guest lecture: Barend Lotter               <ul style="list-style-type: none"> <li>○ Enterprise Agile Practices at Interfor</li> </ul> </li> <li>• Agile project management tools and concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Agile project management (use as reference) (CP)</li> </ul>	<ul style="list-style-type: none"> <li>• Project management <u>individual</u> simulation (see Canvas for details)</li> </ul>
		<ul style="list-style-type: none"> <li>• Case preparation (in class): Parks and Recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Parks and Recreation (CP)</li> </ul>	
	Apr 23	<ul style="list-style-type: none"> <li>• Case presentation: Parks and Recreation               <ul style="list-style-type: none"> <li>○ Planning fallacy and confirmation bias</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Parks and Recreation <u>group</u> submission (see Canvas for details)</li> </ul>
		<ul style="list-style-type: none"> <li>• Case preparation (in class): Joann</li> </ul>	<ul style="list-style-type: none"> <li>• Joann (CP)</li> </ul>	
	Apr 24	<ul style="list-style-type: none"> <li>• Guest lecture: Ankit Virmani               <ul style="list-style-type: none"> <li>○ Data operations and processes</li> </ul> </li> <li>• Ethics in data/ML/AI               <ul style="list-style-type: none"> <li>○ Small group discussion</li> </ul> </li> </ul>		
	Apr 25	<ul style="list-style-type: none"> <li>• Ethics in data/ML/AI               <ul style="list-style-type: none"> <li>○ Class discussion</li> </ul> </li> <li>• Case presentation: Joann</li> </ul>		<ul style="list-style-type: none"> <li>• Joann group submission (see Canvas for details)</li> </ul>
Apr 26	<ul style="list-style-type: none"> <li>• Course wrap-up and reflections</li> </ul>	<ul style="list-style-type: none"> <li>• Reading 3: A New Approach to Designing Work</li> </ul>	<ul style="list-style-type: none"> <li>• Reading and <u>individual</u> response 3 (see Canvas for details); can be submitted by Saturday</li> </ul>	