

COURSE OUTLINE		
TERM: Spring 2021	COURSE NO: BCPT 404	
INSTRUCTOR:	COURSE TITLE: Advanced Business Analytics	
OFFICE: LOCAL: E-MAIL: @capilanou.ca	SECTION NO(S):	CREDITS: 3.0
OFFICE HOURS:		
COURSE WEBSITE: http://elearn.capilanou.ca		

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose territories our campuses are located.

COURSE FORMAT

Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester. May be delivered online or mixed-mode.

COURSE PREREQUISITES

45 credits of 100-level or higher coursework including BCPT 305

CALENDAR DESCRIPTION

This course presents a deep view of management analytics which includes data visualization, data mining and information dissemination approaches, skills, tools and techniques required to run, grow and transform the Business. With this knowledge, students will incorporate the concepts and theories learned in other School of Business courses, to solve integrated business problems. Students' understanding of advanced business analytics toolkits will be strengthened as they learn how to acquire, mine, analyze, disseminate and apply voluminous data sets (big data/social media data) to decision making in today's on-demand economy.

COURSE NOTE

BCPT 404 is an approved Experiential course for Cap Core requirements.

REQUIRED TEXTS AND/OR RESOURCES

Watson, M., & Nelson, D. (2013). *Managerial Analytics*. Upper Saddle River: Pearson. (ISBN: 978-0-13-340742-6) or similar

COURSE STUDENT LEARNING OUTCOMES

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

- Report clearly on the analysis, findings and deliverables of business information management and analytics projects, in the capacity of a Business Analyst or Knowledge Worker.
- Develop hands-on experience with business intelligence, business analytics, data mining and data visualization methodologies, software, tools and techniques

- Critically assess business problems and develop strategies using information management and analytics as they apply to the current on-demand, always on, data driven economy.
- Apply project management, problem-solving and teamwork techniques required for successful execution of an organization's information management projects, processes and assignments.
- Synthesize information, derived from voluminous structured and unstructured data, to facilitate effective and efficient business decision making.

Students who complete this Experiential course will be able to do the following:

- Critically reflect on their progress and development in the context of the course and assess the utility of the acquired knowledge, skills, and values in the learner's personal, academic, or professional trajectory.
- Apply the skills and knowledge of a given discipline or professional context, including working collaboratively in both leadership and team roles.

COURSE CONTENT

Week	Topic
1	Course Introduction - policies, methods, course content The Managerial Analytics Framework -analytics and communicating analytical outcomes
2	Preparation of Data Assets - structured corporate data, unstructured big data,
3	Modelling of Data - connecting data resources
4	Data Evaluation and Visualization
5	Data Presentation Techniques
6	Descriptive Analytics
7	Predictive Analytics
8	Predictive Analytics
9	Prescriptive Analytics
10	Introduction to Machine Learning
11	Multi-dimensional analysis and visualization of data
12	Executive storytelling with data
13	Executive storytelling with data
14-15	Final Group Project- Report and Presentation

EVALUATION PROFILE

Assessment	% of Final Grade
Readiness Assessments	20%
Research Paper	20%
Analytics Projects	30%

Final Project	30%
Total	100%

Research Paper:

Individual research, providing depth into one of the areas of managerial analytics is to be completed early in the course to facilitate self-learning, depth of knowledge, and specialization in one area of course study. This research activity will allow students to critically reflect on their development in managerial analytics landscape assess the utility of the acquired knowledge, skills, and values in the learner's personal, academic, or professional trajectory.

Analytics Project(s):

Students will utilize analytical tools to manage data and develop it into information and actionable knowledge addressing a business problem.

Final Project:

Student teams will collaborate to complete a project that demonstrates their application of the managerial analytics framework and ability to disseminate complex information to an executive audience in an accessible manner.

GRADING PROFILE

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments

Due dates and times for all assessments are posted to Moodle. Late assignments are normally not accepted in this course.

Missed Exams/Quizzes/Labs etc.

Make-up exams, quizzes and/or tests are given at the discretion of the instructor. They are generally given only in medical emergencies or severe personal crises. Generally missed case studies and group work cannot be accommodated. Please consult with your instructor.

Attendance

Students are expected to attend all classes and associated activities.

English Usage

Students are expected to proofread all written work for any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

Electronic Devices

Laptops are encouraged to be used as directed by the instructor. Laptops may not be used during exams or other evaluated work unless directed by the instructor.

On-line Communication

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

UNIVERSITY OPERATIONAL DETAILS

Tools for Success

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <https://www.capilanou.ca/student-life/>

Capilano University Security: download the [CapU Mobile Safety App](#)

Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy and procedures S2017-05 Academic Integrity for more information: <https://www.capilanou.ca/about-capu/governance/policies/>

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;

- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page <https://www.capilanou.ca/about-capu/governance/policies/>).

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.