### Web Analytics TECH 60110A Fall 2020

#### **CONTACT INFORMATION**

Course Coordinator

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#### **Description**

Enhance our understanding of Internet data and of the tools and methods used to analyze this data in order to make strategic decisions relating to an organization's Internet activities.

This course focuses on the unique items of Internet data, especially as pertains to data (e.g., website traffic data), metrics (e.g., shopping cart abandonment rate), and software tools (e.g.: Google Analytics).

#### **Objective**

The main objective of the course is to enhance students' understanding of Internet data and the tools and methods used to analyze this data in order to help them make strategic decisions relating to an organization's Internet activities.

In this course, using a combination of case method, article discussion, a client project and handson exercises, participants will learn how to create, monitor and respond to metrics managing web activities.

### **COURSE FORMAT**

This course uses a combination of case method, article discussions, lectures, hands-on exercises and a real-world web analytics project.

For most of our meetings, we will have some reading assignments. Students are expected to read the assigned textbook and selected other readings *before* class. Also, they should be read *before* addressing solving an assigned case in any depth. The textbook readings and the cases are assigned in tandem to complement each other – although there is never a 1:1 relationship between them. (This isn't a math class.)

#### **Case discussions**

The case method is a subset of the active learning approach, considered the most effective at ensuring long-term retention of concepts and the ability to effectively utilize those concepts by participants. Accordingly, for most sessions we will focus on developing solutions – both individually and collectively – for an actual business case.

• Most weeks, a large portion of classroom time will be spent discussing the case as a class. We will provide more guidance for the process on the first day of class.

- Participation in our case discussions is a critical component of the class and your learning. That being said, it is important to understand that *frequent* participation in class is not as important as the *quality* of participation. That is, you should strive to make effective use of discussion time in class, through thoughtful, timely, and constructive participation.
- We reserve the right to cold call on anyone during class discussions related to assigned readings or case material.

#### Academic article discussions

Since this is an MSc course, we will also read and discuss some academic articles. Our expectations for these will be largely the same as for case studies, although rather than "solving" a case, students will be expected to be able to discuss the article, its findings and make connections between the article and practice.

#### **ZoneCours homework**

Beginning with our second session, participants will be required to respond to some questions regarding the readings and cases on ZoneCours before each class session begins. The goal of the homework is to ensure that participants have read the material and are prepared for class.

### **Expectations regarding homework**

Since the objective of the homework is to ensure that participants are prepared to discuss the readings and cases in class, participants are expected to read the assignments, articles and solve cases *individually* and submit their *individual homework response*, and then we will all discuss and analyze each case and article collectively in class.

The overwhelming majority of participants in prior classes have been surprised by how much they have learned using this approach.

Successfully using this learning model requires that participants imagine themselves as characters in the case and try to solve the case the best they can on their own. Then, when the entire class gets together to discuss the case, the discussion is very interesting and, typically, people see a lot more and learn a lot more about how to solve complex problems than they did on their own.

In order to make this approach work – which means ensuring YOU will learn the most out of the class that you possibly can – you should *only use data in the case and models/tools from the assigned textbook (or other textbooks you have used in the MSc program or your Bacc program)*. Participants should <u>never</u> try to "find out" what really happened or get outside data when analyzing the case. Once that happens, the mental process of learning how to solve a problem on your own is destroyed.

Hence, here are the ground rules for analyzing and preparing cases that we will use for this course:

- Participants must individually complete assignments,
- Participants should not seek an unfair advantage over other participants,
- Participants must truthfully represent fact and self at all times, and
- The professor must be able to trust that these rules are followed in order to grade assignments, grade exams and facilitate classroom discussion.

To ensure these goals and the goals of the class, participants are expected to:

• Work individually on each week's homework;

- Not discuss cases or case questions with other students or people who could give them an unfair advantage before our class discussion;
- Not share any data, information or formatting for write-ups with other participants; and
- Abstain from seeking any information from outside the assigned case or MSc and Bacc. textbooks to when solving a case.

Any violation of these rules will be referred to the Director of the MSc Program.

#### **GRADING/EVALUATION CRITERIA**

### **Individual Evalution (70%)**

**Zonecours Homework (14%)** 

Place: on-line

Assignment format: electronic

Modality: written/quiz

Work Completion Mode: individual

**Description** 

There will be weekly assignments to prepare for class starting in Week 2. These assignments will be done on-line as quizzes, suggested solutions to a case and/or academic article summaries.

Weekly assignments must be completed and submitted on Zonecours before class begins.

# Participation (16%)

Place: in class

Work Completion Mode: individual

**Description** 

Student participation in class will count toward 16% of each student's final grade. Participation is defined as positive interactions during class sessions that moves the class discussion forward, as discussed in the detail comments on Case and Article discussions.

Arriving late or leaving early will negatively affect the participation grade.

# UX Report (10%)

**Place:** at home

Assignment format: paper/electronic

**Modality:** written

Work Completion Mode: individual

**Description** 

There will be an individual User Experience (UX) report that each student must write individually in relation to their group mandate, which will account for 10% of their grade. These reports must be written separately based on individual field work conducted on client experience. The write-ups will be due before session 9.

Reports must be submitted on Zonecours before the deadline. Submitting reports late will receive up to a 10% penalty per 24 hours late.

Final Exam (30%)

Place: in class, scheduled and administered by the Registrar

**Assignment format:** paper or on-line

**Modality:** written

Work Completion Mode: individual

# **Group Project on Client Mandate (30%)**

**Place:** in class/at home

Assignment format: paper/electronic

**Modality:** oral/written

Work Completion Mode: team

**Description** 

Students will form teams of 5 students each to complete an internet consulting project for a client. There will be three group deliverables for the project:

1. A practice presentation during session 12 (5%)

2. A final client presentation during session 13 (10%)

3. A final client report due before session 13 (15%)

Note: Students will evaluate each other in terms of individual contribution to their group project at the end of the semester to ensure accountability on the group projects.

Final grades will be assigned based on the following table:

				Final Grade
	Assessment	Individual	Group	Weight
Zonecours	• 2/2: Excellent	14%		14%
Homework	• 1.25/2: Good	(7/9 highest)		
	• 0: Unacceptable			
Class	• 2 High Contribution	16%		16%
Participation	• 1.5 Positive	(8/10 highest)		
	• 1 Present			
	• 0 Absent or			
	unacceptable			
UX Report	0-10 points	10%		10%
Final Exam	0-30 points	30%		30%
Practice	0-5 points		5%	5%
Presentation				
Final	0-10 points		10%	10%
Presentation				
Final Report	0-15 points		15%	15%
Totals	100 points	70%	30%	100%

### **LEARNING MATERIAL**

Hay L (2017) **Researching UX: analytics**. vol Book, Whole. Sitepoint, Collingwood, Victoria, Australia

• https://www.oreilly.com/library/view/researching-ux-analytics/9781492018391/

Croll A, Yoskovitz B (2013) Lean analytics: use data to build a better startup faster. vol Book, Whole, 1st edn. O'Reilly Media, Sebastopol,

• http://shop.oreillv.com/product/0636920026334.do

#### LIST OF SESSIONS

#### **SESSION 1: OVERVIEW AND INTRODUCTION**

Introduction & Business Models

- Presentation of course outline and pedagogical approach
- What are Web Analytics?
- Why are they important?
- Business Model Canvas
- In class exercise with Business Model Canvas and KPIs

### SESSION 2: WEB ANALYTICS – ANALYTICS' ECOSYSTEM AND MEASURES

Web Analytics – what are they good for?

- Sources and methods for collecting web data
- How can we ensure the validity of web data?
- What is a good KPI?

# Sign up for Google Analytics

### Required Reading:

- Researching UX: analytics:
  - Chapter 1: Why Analytics
- Lean analytics:
  - Section 1: Stop Lying to Yourself (Chapters 1, 2, 3 & 4)

#### Case Assignment:

• Ultrabrand's Journey to a Smarter Web Analytics Product Offering, by Binny Samuel, Ryan Ward-Williams, Pub Date: Nov 16, 2016, HBSP Product #: W16754-PDF-ENG

#### **SESSION 3: CLIENT MANDATE & APPLIED METRICS**

Part I: Client Mandate
Part II: Applied Metrics

#### Required Reading:

- Lean analytics:
  - Section 2: Finding the Right Metric for Right Now (Chapters 5, 6 & 7)

#### Case Assignment:

• Web Analytics at Quality Alloys, Inc. by Rob Weitz and David Rosenthal, Pub Date: Jul 6, 2011, HBSP Product #: CU44-PDF-ENG

# **SESSION 4: GOOGLE ANALYTICS: HANDS ON LEARNING**

Lecture on Google Analytics and related exercises

- Bring your laptop to class for exercises!
- If you are Google Certified in Google Analytics, we would appreciate you coming to class to help your classmates!
- We will also be discussing conversion funnels, attribution models and segmentation.

#### Required Reading:

- Researching UX: analytics:
  - Chapter 2: Getting Set Up

- Chapter 3: An Introduction to Analyzing Data
- Chapter 4: Finding Problems with Analytics

#### SESSION 5: E COMMERCE MODELS AND ANALYTICS &

Part 1: Discussion of Case Study and Academic Article

Part 2: Ecommerce models and its KPIs
Applications of "Lean Analytics Canvas"
Paying traffic and applied exercises

### Required Reading:

- Lean analytics:
  - Chapter 8: Model One: Ecommerce
  - Chapter 13: Model Six: Two-Sided Marketplaces

### Academic Article Assignment:

• Brusch I, Schwarz B, Schmitt R (2019) David versus Goliath - Service quality factors for niche providers in online retailing. Journal of Retailing and Consumer Services 50:266-276. doi: https://doi.org/10.1016/j.jretconser.2019.05.008

#### Case Assignment:

 Flipkart (A): Transitioning to a Marketplace Model, Das Narayandas, Sunil Gupta, Rachna Tahilyani, Pub Date: Nov 3, 2015, HBSP Product #: 516017-PDF-ENG

### SESSION 6: SOFTWARE AS SERVICE AND SEARCH ENGINE OPTIMIZATION (SEO)

Part 1: Case discussion and Customer Lifetime Value (CLV)

Part 2: Organic Traffic and Search Engine Optimization

#### Required Reading:

- "Marketing Analysis Toolkit: Customer Lifetime Analysis," Harvard Business School Publishing background note, by Thomas Steenburgh and Jill Avery; HBSP Product #: 9-511-029
- Lean analytics:
  - Chapter 9: Model Two: Software as Service

#### Case Assignment:

• HubSpot: Inbound Marketing and Web 2.0; by Thomas Steenburgh, Jill Avery, Naseem Dahod; Pub Date: May 14, 2009; HBSP Product #: 509049-PDF-ENG

## SESSION 7: INTERNET ADVERTISING & SEO AND QUALITATIVE METHODS

Part 1: Internet Advertising & SEO Case Discussion

Part 2: Lecture and discussion of qualitative methods and UX

#### Required Reading:

- Researching UX: analytics:
  - Chapter 5: Analytics for User Research
  - Chapter 6: Measuring and Reporting Outcomes
- Understanding Your Users: A Practical Guide to User Research Methods,

Second Edition by Kathy Baxter, Catherine Courage and Kelly Caine – *PDF* available via ZoneCours or online at <u>HEC Bibliothèque</u>

- Chapter 9: Interviews
- Chapter 13: Field Studies selected pages

### Academic Article Assignment:

• Lemon KN, Verhoef PC (2016) Understanding Customer Experience Throughout the Customer Journey. Journal of Marketing 80 (6):69-96. doi:10.1509/jm.15.0420

### **SESSION 8: UX DATA COLLECTION IN FIELD**

- No formal class.
- Students are expected to work on their individual UX reports for their client's mandates
- UX reports are due before Session 9.

### SESSION 9: UX REPORTS DUE, PRESENTATION OF ANALYSIS AND DATA REPORTING

UX Reports are DUE

Lecture: Making Kick-ass presentations

Lecture and Demos: Dashboards and visualizing data

### Academic Article Assignment:

• Gebhardt GF, Farrelly FJ, Conduit J (2019) Market Intelligence Dissemination Practices. Journal of Marketing 83 (3):72-90. doi:10.1177/0022242919830958

### SESSION 10: MEDIA SITE MODEL & SOCIAL MEDIA

- Case discussion
- Article discussion

# Required Reading:

- Lean analytics:
  - Chapter 11: Model Four: Media Site

#### Academic Article Assignment:

 Herhausen D, Ludwig S, Grewal D, Wulf J, Schoegel M (2019) Detecting, Preventing, and Mitigating Online Firestorms in Brand Communities. Journal of Marketing 83 (3):1-21. doi:10.1177/0022242918822300

# Case Assignment:

• French News Start-up L'Opinion: Swimming Upstream in Uncertain Times, Ava Seave, Pub Date: Apr 10, 2019, HBSP Product #: CU240-PDF-ENG

#### SESSION 11: A/B TESTING AND TESTING TOOLS

Part 1: Introduction to complimentary and other measures

Part 2: Case discussion regarding A/B testing

Part 3: Quick demo/review of select A/B testing tools

#### Required Reading:

# • Harvard Business Review Digital Articles:

- Gallo A (2017) <u>A Refresher on A/B Testing</u>. Harvard Business Review Digital Articles: June 28, 2017
- Jenkins W (2014) <u>A/B Testing and the Benefits of an Experimentation Culture</u>. Harvard Business Review Digital Articles: February 5, 2014
- Fung K (2014) "Yes, A/B Testing Is Still Necessary". Harvard Business Review Digital Articles; December 10, 2014

### Case Assignment:

• Rocket Fuel: Measuring the Effectiveness of Online Advertising; by Zsolt Katona, Brian Bell; Pub Date: Jun 30, 2017; HBSP Product #: B5894-PDF-ENG

### **SESSION 12: PRELIMINARY/PRACTICE CLIENT PRESENTATIONS**

Each team will meet separately with their professor to practice their client presentation and receive feedback to update the presentation for the following week.

### **SESSION 13: FINAL CLIENT PRESENTATIONS**

Required attendance for everyone.