GEORGETOWN UNIVERSITY
School *of* Continuing Studies
Public Relations and Corporate Communications

MPPR-506-02: Digital Analytics and Measurement
Georgetown University: MPS-Public Relations and Corporate Communications
Mondays 5:20pm – 7:50pm | Fall 2016

Instructor: Michael Lukich
Class Time: Mondays, 5:20 – 7:50 pm
Room: C220

COURSE INFORMATION

Overview

This course will provide students with a base knowledge of digital analytics strategies and tactics. Students will learn how to obtain data, how to analyze data and turn it into insights, and how to present and communicate insights into actionable recommendations. We will review key digital analytics concepts and be exposed to a wide variety of platforms and tools throughout the semester.

Objectives

By the end of this course, students will have the ability to:

- Understand digital analytics metrics and key performance indicators (KPI's)
- Demonstrate an awareness of market-leading analytics tools (e.g. Google Analytics, Tableau, etc.)
- Efficiently analyze a data set
- Present data in a meaningful way through data visualizations with clients, stakeholders, and executives as the intended audiences
- Analyze digital information and generate insights to make actionable recommendations

Philosophy

This class will be practical and interactive. While we will lecture about the fundamentals and overall strategy of digital measurement, a majority of class time will be devoted to honing real-world skills through presentations and operating digital analytics and advertising platforms. You are encouraged to bring your real world experience and perspectives in digital analytics into the classroom.

LOGISTICS

Class Time

Mondays: 5:20 – 7:50 PM

We will begin at 5:20 and have two short breaks during the class. Our sessions will be interactive, and will be a combination of lectures, student presentations, and/or guest speakers. You should plan to bring your laptop to each class.

Contact

Email is the best method to get in touch with me. I will respond to all messages within 48 hours.

Class Communication

In order to promote a collaborative learning environment, we will use Blackboard to communicate with each other throughout the course. This will be a great way to share information, ask questions, and participate in group discussions.

Technology

You should plan to bring your laptop to each class, as there may be components that require you to be online during the class session. Taking notes via laptops is encouraged, however all laptops must be closed for student presentations and guest speakers. Mobile phone use during class time is not permitted.

Office Hours

Office hours are by appointment only. I will usually be available after class. If needed, I am also available to schedule phone appointments during non-business hours. Please email me to schedule an appointment.

Attendance

Attendance is critical to your success in the class. I will circulate an attendance sheet at the start of every class. Students will be given one free unexcused absence. Missing two classes without providing the instructor ample notice will result in a final grade reduction of one level (for example, an A will be converted to an A–). Additional unexcused absences will result in a further reduction of your final grade. If you are absent for more than four classes, you will be in danger of failing the course.

Class Teams

Teamwork is necessary for success, even beyond your time at Georgetown. As such, almost half of your final grade will be tied to assignments completed within a team setting. Students are to organize into teams of 4 for two assignments throughout the semester (see below). You will have the same team for both assignments. Please submit all teams to the instructor by Class 2 (September 12).

ASSIGMENTS AND GRADING

Readings

Most readings will be relevant articles, blogs, or case studies. Initial reading assignments are listed in the course schedule below. However, these are subject to change and will be finalized one week in advance throughout the semester.

Assignments & Grade Inputs

The class assignments will include the items below. The mid-term and final instructions will be posted to Blackboard at the beginning of each course. The individual digital assignments will be posted to Blackboard 2 weeks before the assignment is due.

Late assignments will not be accepted for the Mid-Term, Final, and Data Visualization Improvement. Late submissions for the Individual Digital Assignments will be penalized 5 points per calendar day until they are submitted.

Class Participation (35 points)
Class provides an opportunity for us to learn from each other, to challenge each other in constructive ways, and to deepen our understanding of the subject. You are expected to bring your relevant experiences and viewpoints to the class as we approach the various topics throughout the semester. Positive contribution of all kinds is highly encouraged. Your contribution to the discussion and as a member of your groups on team project will be reflected in your final grade at the discretion of the instructor and through peer evaluations.

Individual Digital Assignments (3 analyses totaling 90 points)
Throughout the semester, 3 individual assignments (consisting of sample data sets or other digital problems) will be provided. Students are to provide a short diagnosis of the assignment (approximately 1-page single spaced – visualizations and/or data tables are encouraged where relevant). We will then discuss the problems and solutions as a group at the next class. Diagnosis will vary based on class topics, such as data validity, making sense of data and turning them into insights, creating recommendations based on the data, and data visualizations. Detailed instructions and direction for the analyses will accompany each assignment.

Data Visualization Improvement (50 points)
Students will find and improve a poor data visualization to share with the class. You are to provide an analysis in a digestible way for the other students in the class through presentations throughout the semester. Each presentation should highlight the poor data visualization, explain why the visualization is poor, and describe how the information could be better consumed by the audience. You should also attempt to create a better, revamped visualization with the same data.

Presentations will be limited to 10 minutes, plus 5 minutes of Q&A. Students should prepare a 3-5 slide PowerPoint deck. These presentations should mimic a client presentation, so please present your information in a client-friendly way (hint: simple but effective slides will be greatly valued). Please bring a printout of your slides to turn in.

Grading for the assignment will follow the following point structure:

20 points – Quality of Data Visualization Selection
20 points – Quality of Improvement
10 points – Presentation Quality

There will be 2-3 presentations each week at the start of class, beginning in Class 4. I will provide a sign-up sheet with the available dates in the first class.

Mid-Term Group Presentation: Competitive Analysis / Audit (50 points)
Each group will pick 3-5 organizations within an industry and analyze their relative digital presence and strategy across their digital channels. This includes, but may not be limited to, their website, social channels, paid channels, mobile presence, or other digital areas. Tools and ways to obtain this data will be discussed during Class 4.

Groups are to select organizations / industry and submit to instructor for approval by Class 3. Groups will have class time during Class 7 to review their draft presentations with the instructor if they wish. This review is directional only and will not count towards the total grade.

Grading for the assignment will follow the following structure:

5 points – PowerPoint Slide Quality & Data Visualizations
10 points – Presentation Quality & Use of Time
15 points – Project Scope & Content
20 points – Analysis Quality

Student teams should prepare a 15-20 slide presentation highlighting their findings. Please email a soft copy to the instructor by 12:00 pm on the day of the presentation. Presentations will be limited to 20 minutes with 10 minutes of Q&A.

Final Group Presentation: Digital Analytics Project (75 points)
Bringing everything together that we've discussed in class, you are to analyze the digital presence of one website or company. As this is a digital analytics class, your analysis should be data driven. You will then analyze and present the data in a meaningful and actionable way. You should include recommendations and have the data to back up these recommendations.

To conduct this assignment, you must obtain access to a website's analytics (e.g. Google Analytics) account. You may choose readily available sources, such as a group member's blog or company website. You may also choose to reach out to a local non-profit or small business and offer your services pro-bono (they might want the free advice!).

Students should choose their final website analysis and submit to instructor for approval by Class 8. If you have difficulty coming up with a website, you should see the instructor by Class 7. Students will have class time during Class 13 to review their draft presentations with the instructor if they wish. This review is directional only and will not count towards the total grade.

Grading for the assignment will follow the following structure:

10 points – PowerPoint Slide Quality & Data Visualizations
15 points – Presentation Quality & Use of Time
25 points – Experiment Design
25 points – Analysis Quality

Your final deliverables will be a final PowerPoint presentation (15-25 slides) and a 3-5 page paper (single spaced) discussing the purpose of the website, it's performance and how that complements its other digital presences, and your final recommendations. Please email a soft copy of both to the instructor by 12:00 pm on the day of the presentation. Presentations will be limited to 30 minutes with 10 minutes of Q&A.

Grading Breakdown
Each student can receive up to 300 points throughout the semester. The weighted breakdown by item is shown below:

35 points – Class Participation
90 points – Individual Digital Data Analyses (3 total)
50 points – Data Visualization Improvement
50 points – Mid-Term Group Presentation

75 points – Final Group Presentation

Graduate course grades include A, A-, B+, B, B-, C, and F. There are no grades of C+, C-, or D. The numeric breakdown for final grades in the course are as follows:

300 – 279	A	248 – 240	B-
278 – 270	A-	239 – 210	C
269 – 261	B+	209 – 0	F
260 – 249	B		

UNIVERSITY RESOURCES

Support Resources
Georgetown offers a variety of support systems for students that can be accessed on main campus or at the downtown location:

- **MPS Writing Resource Program:** 202-687-4246 | http://writingcenter.georgetown.edu/
- **Academic Resource Center:** 202-687-8354 | arc@georgetown.edu | http://academicsupport.georgetown.edu/
- **Counseling and Psychiatric Services:** 202-687-6985 | http://caps.georgetown.edu/
- **Institutional Diversity, Equity & Affirmative Action (IDEAA):** 202 -687-4798 | https://ideaa.georgetown.edu/

Students with Disabilities Policy
Students with documented disabilities have the right to specific accommodations that do not fundamentally alter the nature of the course. Students with disabilities should contact the Academic Resource Center (202-687-8354; arc@georgetown.edu; http://academicsupport.georgetown.edu/disability) before the start of classes to allow time to review the documentation and make recommendations for appropriate accommodations. If accommodations are recommended, you will be given a letter from ARC to share with your professors. You are personally responsible for completing this process officially and in a timely manner. Neither accommodations nor exceptions to policies can be permitted to students who have not completed this process in advance.

Georgetown Honor System
All students are expected to maintain the highest standards of academic and personal integrity in pursuit of their education at Georgetown. Academic dishonesty in any form is a serious offense, and students found in violation are subject to academic penalties that include, but are not limited to, failure of the course, termination from the program, and revocation of degrees already conferred. All students are held to the Honor Code. The Honor Code pledge follows:

In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Georgetown University Honor System: To be honest in any academic endeavor, and To conduct myself honorably, as a responsible member of the Georgetown community, as we live and work together.

Plagiarism

Stealing someone else's work is a terminal offense in the workplace, and it will wreck your career in academia too. Students are expected to work with integrity and honesty in all their assignments. The Georgetown University Honor System defines plagiarism as "the act of passing off as one's own the ideas or writings of another." More guidance is available through the Gervase Programs at http://gervaseprograms.georgetown.edu/honor/system/53377.html. If you have any doubts about plagiarism, paraphrasing and the need to credit, check out http://www.plagiarism.org.

COURSE SCHEDULE

The syllabus may change to accommodate discussion of emerging topics. Also, the schedules of guest speakers may require some shifting of the agenda. The instructor will make every effort to provide as much advance notice as possible for any alterations.

Please have all assigned readings completed prior to class, as they will play a large role in the discussion.

Class 1 – Class Overview & Introduction to Digital Analytics & Metrics – Wednesday, 8/31

Agenda:
- Introductions
- Review Syllabus
- Introduction to Digital Analytics
- Metric Overview
- Metrics vs. KPI's
- Selection of Individual Data Presentations
- Preliminary Survey to Determine Baseline Knowledge

Assigned Reading:
- *Web Analytics Demystified* – http://www.kaushik.net/avinash/web-analytics-demystified/
- *The Importance of Digital Analytics (video)* – https://analyticsacademy.withgoogle.com/course01/unit?unit=2&lesson=1

Class 2 – Metrics (continued) & Data Visualizations – Monday, 9/12

Agenda:
- Survey Results
- Useless vs. Useful Metrics
- Metric Use Case
- Data Visualization Overview & Tips
- Visualization Types

Assigned Reading:
- *Digital Marketing & Measurement Model* – http://www.kaushik.net/avinash/digital-marketing-and-measurement-model/
- *Kill Useless Web Metrics: Apply The "Three Layers of So What" Test* – http://www.kaushik.net/avinash/kill-useless-web-metrics-apply-so-what-test/

- *10 Best or Worst Ways to Vizualize Web Analytics Data* – http://online-behavior.com/analytics/data-visualization
- *How to Present Data in Powerpoint* – http://www.slideshare.net/MattHunter/how-to-present-data-in-powerpoint

Class 3 – Data Visualizations (continued) and How to Analyze Data Sets in Excel – Monday, 9/19 – VIRTUAL CLASS

Agenda:
- Typical Client Questions
- Creating Views in Excel and Tableau
- Analysis of Data Sets
- Use Cases & Example Analyses
- Tool Review: Excel

Due:
- Team & Mid-Term Industry Selections

Assigned Reading:
- *Core Analysis Techniques (video)* – https://analyticsacademy.withgoogle.com/course01/unit?unit=2&lesson=2
- *Data Analysis in Excel (please read all the sub-sections)* – http://www.excel-easy.com/data-analysis.html
- *This class will be very Excel focused – you can also take advantage of free Excel training by Lynda*

Class 4 – Industry Data & Digital Structure / Terms – Monday, 9/26

Agenda:
- Discussion of Individual Analysis #1
- Available Data
- Finding Competitive Information
- Digital Structure (Websites, Channels, Platforms)
- Digital Terms

Due:
- Individual Assignment #1

Assigned Reading:
- *The Definitive Guide To (8) Competitive Intelligence Data Sources!* – http://www.kaushik.net/avinash/competitive-intelligence-data-sources-best-practices/
- *Website Competitive Analysis Tools: 10 Ways to Check the Competition* – http://www.orbitmedia.com/blog/website-competitive-analysis-tools/

Class 5 – Websites – Monday, 10/3

Agenda:

- Individual Presentations
- Website Metrics
- Website Analytics & Available Data
- Website Analytics Use Case
- Tool Review: Google Analytics

Assigned Reading:
- *7 Key Metrics to Track the Success of Your Website* – http://torquemag.io/2015/03/7-key-website-metrics-track/
- *Key Metrics and Dimensions Defined (video)* – https://analyticsacademy.withgoogle.com/course01/unit?unit=3&lesson=2
- *How Does Google Analytics Collect Information* – http://www.lunametrics.com/blog/2016/06/22/google-analytics-collects-information/

Open Class to Work through Digital Analytics Fundamentals – Monday, 10/10

Agenda:
Work through the rest of the Google Analytics Academy – Digital Analytics Fundamentals Videos
https://analyticsacademy.withgoogle.com/course/1/unit/1/lesson/1

Class 6 – Email & Display – Monday, 10/17

Agenda:
- Individual Presentations
- Email Metrics
- Email Analytics & Available Data
- Display Metrics
- Display Analytics & Available Data

Assigned Reading:
- *Back to Basics: Email Marketing Metrics* – http://www.clickz.com/clickz/column/2269547/back-to-basics-email-marketing-metrics
- *Email Marketing: Campaign Analysis, Metrics, Best Practices* – http://www.kaushik.net/avinash/email-marketing-campaign-analysis-metrics-practices/
- *Mapping the Display Landscape* – http://www.netmining.com/pdf/Netmining-Mapping-Digital-Display-Landscape.pdf

Class 7 – Social Media & Mobile – Monday, 10/24

Agenda:
- Individual Presentations
- Social Metrics
- Social Analytics & Available Data (Facebook, Twitter, & LinkedIn)
- Mobile Metrics
- Mobile Platform
- Review Draft Mid-Term Presentations with Instructor

Due:
- Draft Mid-Term Presentations

Assigned Reading:
- *Best Social Media Metrics: Conversation, Amplification, Applause, Economic Value* – http://www.kaushik.net/avinash/best-social-media-metrics-conversation-amplification-applause-economic-value/
- *Why Social Media Advertising Is Set To Explode In The Next 3 Years* – http://marketingland.com/social-media-advertising-set-explode-next-3-years-121691
- *Web Analytics vs Mobile Analytics: What's the Difference?* – http://www.analyticshero.com/2013/07/24/web-analytics-vs-mobile-analytics-whats-the-difference/

Class 8 – Mid-Term Presentations – Monday, 10/31

Agenda:
- Mid-Term Group Presentations

Due:
- Final Mid-Term presentation slides

Class 9 – A/B & Multivariate Testing – Monday, 11/7

Agenda:
- Individual Presentations
- A/B Testing Overview
- A/B Test Examples
- Multivariate Tests
- Tips for Good Tests
- Tool Review: Optimizely

Assigned Reading:
- *A/B Testing* – https://www.optimizely.com/ab-testing/
- *Multivariate Testing* – https://www.optimizely.com/resources/multivariate-testing/
- *Comparing a Multivariate Test to an A/B Test* – https://www.optimizely.com/resources/multivariate-test-vs-ab-test/
- *12 Tips To Take Your A/B & Multivariate Testing To The Next Level* – http://marketingland.com/12-tips-to-take-your-ab-multivariate-testing-to-the-next-level-50249

Class 10 – CRM & Data Aggregation – Monday, 11/14

Agenda:
- Discussion of Individual Analysis #2
- Customer Data Tracking
- CRM
- Data Warehouses

- Lifetime Value

Due:
- Individual Analysis #2

Assigned Reading:
- *Calculate Customer Lifetime Value* – http://www.kaushik.net/avinash/analytics-tip-calculate-ltv-customer-lifetime-value/
- *What Retail Stores Want to Do With Your Consumer Data* – http://mashable.com/2014/10/15/consumer-tracking-retailers/
- *Beyond Web Analytics: 5 Types of Online Data You Should Be Tracking* – http://www.entrepreneur.com/article/227578

Class 11 – Metric Frameworks & Dashboarding – Monday, 11/21

Agenda:
- Individual Presentations
- Metrics & Dimensions Review
- Measurement Frameworks
- Dasbhoards
- Demo – Tableau (again!)
- How to Foster a Data Driven Culture

Assigned Reading:
- *How to Develop a Measurement Framework that Delivers Business Intelligence* – http://go.market-bridge.com/rs/074-EEH-453/images/Measurement_Framework_Whitepaper_Final.pdf
- *Five Rules for High Impact Web Analytics Dashboards* – http://www.kaushik.net/avinash/five-rules-for-high-impact-web-analytics-dashboards/

Class 12 – Attribution and Marketing ROI – Monday, 11/28

Agenda:
- Individual Presentations
- Attribution
- Attribution Models
- Marketing ROI

Assigned Reading:
- *Multi-Channel Attribution: Definitions, Models and a Reality Check* – http://www.kaushik.net/avinash/multi-channel-attribution-definitions-models/
- *How to Measure the ROI of Marketing Programs* – http://blog.marketo.com/2013/03/how-to-measure-the-roi-of-your-marketing-programs.html

Class 13 – Bringing it All Together: Case Studies on How Digital Analytics is Used in Corporate America – Monday, 12/5

Agenda:
- Discussion of Individual Analysis #3
- Digital Analytics Case Studies & Discussion
- Course Wrap-Up
- Review Draft Final Presentations with Instructor

Due:
- Individual Analysis #3

Class 14 – Final Presentations – Monday, 12/12

Agenda:
- Final Group Presentations
- Course Survey

Due:
- Final Presentation Slides & Write-up

SUGGESTED RESOURCES

I highly encourage you to rely on the resources below to complete assignments and to get hands on experience. Please install or bookmark them. Please note that you are not limited to these below. You are encouraged to try out other tools that may be useful and share them with the class.

Additional Analytics Reading

I highly recommend the following book:

Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity by Avinash Kaushik

We dive into articles by Avinash Kaushik throughout the semester, but this is a comprehensive guide to digital and web analytics, and can be leveraged in the course. This book is available in the Georgetown library.

Excel Helpful Links

- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-1-19840/
- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-2-20453
- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-3-21435
- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-4-22119
- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-5-master-pivot-tables-22684
- http://searchengineland.com/how-to-excel-at-excel-for-sem-applications-part-6-23642

PowerPoint Presentations

http://www.lifehack.org/articles/technology/10-tips-for-more-effective-powerpoint-presentations.html

Google Analytics Academy

https://analyticsacademy.withgoogle.com/explorer

Lynda.com

To access Lynda.com with your GUid you need to use this link
(Requires your NETID and password)

Web Sites/Blogs

As technology constantly changes, staying up with current events and advancements is essential. In addition to reading the daily news, these are very good digital/social resources for you to use in deepening your knowledge.

Analytics

Occam's Razor: http://www.kaushik.net/avinash/
Analytics Talk: http://cutroni.com/
Online Behavior: http://online-behavior.com

Advertising/Marketing

Advertising Age: http://www.adage.com
Ad Exchanger: http://www.adexchanger.com
Ad Week: http://www.adweek.com
eMarketer: http://www.emarketer.com
Mediapost: http://www.mediapost.com
MarketBridge: http://www.the-digital-bridge.com

Technology

Tech Crunch: http://www.techcrunch.com/
Re/code: http://recode.net/
Mashable http://www.mashable.com/

Social Media

Allfacebook: http://allfacebook.com
Inside Facebook: http://www.insidefacebook.com
Twitter's Blog: http://blog.twitter.com