MPPR-506-01 DIGITAL ANALYTICS
Georgetown University, School of Continuing Studies
Fall 2015 | Tuesdays, 8:00 pm - 10:30 pm

Instructor: Mia Vallo
Class location: 640 Massachusetts Ave, NW, Washington, DC, Room C218

COURSE OVERVIEW
This course will provide students with a solid foundation and working knowledge of digital analytics strategies and tactics. Students will learn about leading digital analytics tools available in the market, how to gather data, how to turn data into insights, and how to present and communicate data-driven information to clients and executives. We will review digital analytics for websites, apps, social media, and touch upon A/B testing, digital advertising, and multi-attribution.

COURSE OBJECTIVES
By the end of this course, students will be able to:

- Understand digital analytics metrics and KPIs (key performance indicators)
- Have a working knowledge of leading digital analytics tools, such as Google Analytics, comScore, Facebook Insights, and Twitter
- Analyze data from an analytics tool and from a spreadsheet, and provide insights and recommendations based on data
- Present data in a meaningful way through data visualizations with clients, stakeholders, and executives as the intended audiences

PHILOSOPHY
This is an interactive class and discussions are highly encouraged. About half of class time will be focused on discussing digital analytics topics and conducting peer review of select class assignments. Guest speakers may also visit the class to share their experiences and answer questions on digital analytics in their fields.

ADMINISTRATIVE
ATTENDANCE
We will circulate an attendance sheet at the beginning of each class. If you have to miss a class, please contact me in advance to make arrangements for making up the work that you will miss. As outlined by the university, missing two or more classes will result in a final grade reduction of one level (for example, an A will be converted to an A-). **Absences for classes, beyond the initial two, will result in further reduction of the final grade.** If you are absent for more than four classes, you will be in danger of failing this course.

COMMUNICATION
The best way to reach me is via email. I will get back to you in 1-2 days.

OFFICE HOURS
Office hours are by appointment only. I am usually available before class to answer your questions. We can also schedule calls during non-business hours if needed.

CLASSROOM ETIQUETTE
The use of mobile devices is prohibited unless related to the current lessons.

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

UNIVERSITY 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/](http://writingcenter.georgetown.edu/)

- Academic Resource Center
  202-687-8354 | [arc@georgetown.edu](mailto:arc@georgetown.edu)
  [http://academicsupport.georgetown.edu](http://academicsupport.georgetown.edu)

- Counseling and Psychiatric Services
  202-687-6985
  [http://caps.georgetown.edu/](http://caps.georgetown.edu/)

- Institutional Diversity, Equity & Affirmative Action (IDEAA)
  (202) 687-4798
  [https://ideaa.georgetown.edu/](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) 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.

ASSIGNMENTS
PARTICIPATION
Discussions are highly encouraged so we can learn from each other and deepen our understanding of digital analytics. You are expected to bring your relevant experience from your fields to the class discussions. Your participation will be reflected in your final grade.

INDIVIDUAL PROJECTS
Digital Analytics Diagnosis
Sample data sets will be provided after class, where students will provide a short, written diagnosis of the data sets, and discuss the problems and solutions at the next class. Diagnosis
will vary based on class topics, such as data validity, making sense of data and turning them into insights, coming up with recommendations based on the data, and data visualizations.

**Analyst Presentations and Client Review**

We will role play analysts and stakeholders or clients in class, where a student plays the analyst role and the rest of students play the clients. The analyst is to present his/her insights and recommendations to the clients. The clients are to observe the presentation and engage in a discussion of the insights and recommendations.

There will be two students presenting in the beginning of the class. Each presentation should last between 3 and 5 minutes, followed by up to 5 minutes of Q&A.

All students are expected to be prepared prior to class for the discussions; clients need to read the materials and understand the business problem, and analysts need to understand the business problem, analyze the data set, and prepare the presentations.

Analysts will need to provide a soft copy the day before class time and a hard copy of your presentation prior to class time to the instructor. Keynote and Powerpoint are accepted.

In addition to the presentation, analysts will need to email a one-page executive summary prior to class time to the instructor. The executive summary should include the business problems, your insights and recommendations, and how you arrive at your recommendations.

Clients are expected to engage with analysts by asking questions about the presentations, commenting on how they may approach the problem differently, and/or providing additional recommendations based on the data. Client review is counted towards class participation.

**TEAM PROJECTS**

**Mid-Term Group Presentations: Competitive Analysis**

Students will form groups consisting of 5 students and present a competitive analysis of 2 to 4 organizations on their digital presence in earned, owned, and paid media. Access to tools to facilitate assignment will be provided.

Please provide a soft copy of your presentation the day before class time and a hard copy of your presentation prior to class time to the instructor. Keynote and Powerpoint are accepted. Students are to form a team and select the organizations by week 5. A review of the draft presentation and group progress will be conducted during week 8 during class time.

**Final Group Presentations: Digital Business Case Study**

The four groups from the mid-term assignment will present an analysis of a digital business problem or opportunity. The case study can be obtained from one of the group members’ real-life situation or from a Harvard Business Case Study (provided by the instructor).
The presentation needs to include the problem to solve or opportunity to take on, and recommendations for the problem or opportunity based on data.

Students are to select the organization and case by week 6. A review of the draft presentation and group progress will be conducted during week 14 during class time.

Please provide a soft copy of your presentation the day before class time and a hard copy of your presentation prior to class time to the instructor. Keynote and Powerpoint are accepted.

In addition to the presentation, each group is to submit a written summary (between 4 to 10 pages) of the case study via email prior to presentation. In the summary, include the problem or opportunity, your methodology in collecting the data, and how you utilize data available to arrive to your recommendations.

**GRADING**

50 points = Digital Analytics Diagnosis (5 points each for 10 assignments total)  
50 points = Analyst Presentation and Executive Summary (1 assignment)  
70 points = Mid-Term Group Presentation (1 assignment)  
100 points = Final Group Presentation and Paper (1 assignment)  
30 points = Class Participation (2 points each class for 14 total classes + 2 freebies)

**300 POINTS TOTAL**

Graduate course grades include A, A-, B+, B, B-, C, and F. There are no C+, C-, or D.

- A 300.0 - 279  
- B- 278.9 - 270  
- A- 279.9 - 264  
- B 263.9 - 210  
- B+ 269.9 - 264  
- F 209.9 - 0

**CLASS SCHEDULE**

**Week 1 (September 8) - Introduction to Digital Analytics**
- Class overview: objectives, syllabus review, and assignments
- Overview of digital metrics for content and commerce from various channels
- Selecting KPIs (Key Performance Indicators) and setting goals
- Understanding data sources and top challenges in digital analytics
- Survey to determine baseline knowledge and what students hope to achieve

**Week 2 (September 15) - Website Analytics**
- *Due: Digital Analytics Diagnosis (KPIs)*
- Website analytics: overview of web analytics, understanding key metrics, and review sample reports
- Review analytics tools: Google Analytics, Adobe SiteCatalyst, and Crazy Egg
Week 3 (September 22) - App Analytics
- Due: Digital Analytics Diagnosis (website analytics)
- Analyst presentations (three analysts) and client review
- App analytics: overview of app analytics, understanding key metrics, and review sample reports
- Review analytics tools: Google Analytics, Adobe DPS, and Localytics

Week 4 (September 29) - Competitive Analysis
- Due: Digital Analytics Diagnosis (app analytics)
- Analyst presentations (two analysts) and client review
- Competitive analysis: overview of competitive analysis, understanding key metrics, and review sample reports
- How to find information on your competitors
- Review analytics tools: Similar Web, Quantcast, and comScore

Week 5 (October 6) - Social Media Analytics
- Due: Team selection and organization selection for the mid-term presentation
- Due: Digital Analytics Diagnosis (competitive analysis)
- Social Media analytics: overview of social media analytics, understanding key metrics, and review sample reports
- Review analytics tools: Google Analytics, Facebook Insights, Twitter Analytics, Google Alerts, Social Mention, Topsy, and YouTube

Week 6 (October 13) - Making Data Insightful and Actionable
- Due: Organization or case study selection for the final presentation, to be approved by the instructor
- Due: Digital Analytics Diagnosis (social media analytics)
- Analyst presentations (three analysts) and client review
- How to prioritize data collection and identify key metrics
- How to turn data into meaningful and actionable insights

Week 7 (October 20) - Data Visualization and Digital Dashboarding
- Due: Digital Analytics Diagnosis (turning data into actions)
- Analyst presentations (three analysts) and client review
- How to humanize data so the audience can understand and take actions
- How to create and successfully roll out an enterprise wide digital dashboard
- Review analytics tools: Google Analytics, Domo, and Tableau

Week 8 (October 27) - Creating a Data-Driven Culture and Group Work on Mid-Terms
- Due: Digital Analytics Diagnosis (data visualization and/or dashboarding)
- Due: A written summary of the case study
• Analyst presentations (three analysts) and client review
• How to create a data-driven culture: top challenges, overcoming obstacles, and examples of organizations with data-driven culture
• Group workshops and review draft presentations with instructor

**Week 9 (November 3) - Digital Marketing Overview and Mid-Term Group Presentations**
• *Due: A soft copy (Keynote or Powerpoint) of the group presentations to be submitted to the instructor by Noon on November 2nd*
• Mid-term group presentations (four groups)
• Digital marketing overview part 1: display advertising and search (organic and paid)
• Review digital marketing tools: Google Analytics, Google Webmaster Tools, Google AdWords, and DoubleClick

**Week 10 (November 10) - Digital Marketing Analytics**
• Analyst presentations (two analysts) and client review
• Digital marketing overview part 2: social media advertising, email marketing, partnerships, and affiliate marketing
• Digital marketing metrics: understanding key metrics and review sample reports
• How to set goals and measure the performance of digital marketing campaigns
• Review analytics tools: Google Analytics, Domo, Responsys, and CJ

**Week 11 (November 17) - Introduction to A/B and Multivariate Testing**
• *Due: Digital Analytics Diagnosis (digital marketing analytics)*
• Analyst presentations (three analysts) and client review
• A/B and multivariate testing: overview, best practices when planning and implementing tests, and review sample tests and reports
• Review testing tools: Monetate and Optimizely

**Week 12 (November 24) - No class, Thanksgiving week**

**Week 13 (December 1) - Multi-Attribution of Marketing Campaigns**
• *Due: Digital Analytics Diagnosis (A/B test results)*
• Analyst presentations (three analysts) and client review
• Multi-attribution methodologies and common practices
• Attribution challenges and opportunities

**Week 14 (December 8) - Marketing ROI and Group Work on Final Presentations**
• *Due: Digital Analytics Diagnosis (multi-attribution)*
• Analyst presentations (three analysts) and client review
• Overview of marketing ROI (Return on Investment)
• How to create, assign, and optimize marketing/campaign budget
• Group workshops and review draft presentations with instructor
Week 15 (December 15) - Final Group Presentations

- *Due:* A soft copy (Keynote or Powerpoint) of the group presentations to be submitted to the instructor by Noon on December 14th
- *Due:* A written summary of the case study
- Final group presentations (four groups)