# DIGITAL ANALYTICS

**ADV 442, section 101**
Summer 2019 (5/13 – 6/27)

## Instructor

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## Class location

223 Natural Resources Building

## Lecture days and times

12:40 – 3:30 Mondays and Wednesdays

## Office Hours

Monday at 11:00-12:00 or by appointment. Whenever possible, please make an appointment if you plan to drop by my office hours. This will ensure we'll have enough time to talk.

## Course Objectives

The rise of digital technologies means that advertising and public relations professionals have access to more data than ever before. Students will learn how to collect and analyze digital data and report meaningful patterns to inform strategic advertising and public relations decision-making. The primary learning objectives include (but are not limited to) the following:

❖ to develop skills of using contemporary digital analytics tools that include software and hardware that register information about individuals' personal characteristics, attitudes, feelings, and thoughts, as well as their behaviors in the online world;
❖ to apply skills of using contemporary digital analytics tools in a real-life setting;
❖ to develop analytical thinking skills to recognize meaningful patterns in the limitless sea of data;
❖ to explain how meaningful patterns identified through digital data analysis can be useful to companies, organizations, and individuals in targeting consumer segments, conducting competitive analysis, and developing innovative and ethical communication strategies;
❖ to think critically about data available through various digital tools and the analyses based on those data;
❖ to practice effective storytelling with quantitative data using various message formats.

## Required and Recommended Texts

All assigned readings will be posted on D2L and/or distributed in class. There is no required textbook to purchase for this class.

# Description of Assignments

### In-class exercises (10 points each)
During the semester you will complete 10 in-class exercises and/or quizzes. These exercises are designed to help you practice your new digital analytics skills. Each exercise is worth 10 points. Exercises will be provided in almost each class, so attending each class is mandatory. If a class is missed, you will lose points for in-class exercises unless you have a valid excuse for your absence.

### Homework assignments (25 points each)
You will receive three homework assignments. You will have one week to complete each assignment and submit it on D2L. These assignments are designed to assess your knowledge and skills related to three topics: 1) audience analytics, 2) social media analytics, and 3) web analytics. They assignments will help you complete the final project.

### Final group project (client project and presentation) (100 points)
Your final project in this course is a comprehensive digital analytics audit for a local organization (client). This is a group project. You will be asked to work in groups of 4 to 5 students. We will be discussing this assignment in class throughout the semester in much more detail. On **June 24**, you will submit the project draft on D2L. Project presentations will be scheduled on the same day (**June 24**). The client will be present during the presentations and will contribute to each project's assessment. Members of the winning team will receive 100 points (maximum grade) on the final project.

### Participation (25 points)
Your participation grade will be depend on (a) your class attendance and (b) active participation during class.

### Exam (100 points)
There is a final exam in this course. It will be an in-class exam on Wednesday, **June 26**, from 1:30 to 3:30 pm. The class will start at 12:40 pm, as usually; we will use the time before the exam for exam review.

## Grading
### Evaluation criteria
- **Excellent.** The work is rigorous, creative, and shows a thorough knowledge of the materials. An excellent piece of work written in a clear and concise manner. Few, if any, errors of fact or writing.
- **Good.** The work has few errors, but shows a good effort at comprehending the material. Clear, understandable writing with some care and expression of knowledge. Discussion needs more clarity, more development and/or more examples. The work may be missing some of the subtleties of the argument.
- **Fair.** An adequate but superficial completion of the assignment. Few examples used or discussion or argument is unsubstantiated. Sources are poorly cited, many errors of fact, inadequate writing and grammar.
- **Failure.** Assignment not completed or turned in extremely late.

## Grade Breakdown

| Assignment | Points | % of Grade |
|---|---|---|
| In-class exercises (10 X 10 points each) | 100 | 25% |
| Homework assignments (3 X 25 points each) | 75 | 18.75% |
| Client project and presentation (final group project) | 100 | 25% |
| Class participation | 25 | 6.25% |
| Final exam | 100 | 25% |
| **TOTAL** | **400** | **100%** |
| Extra credit is available in this course | + up to 20 points | + up to 5% |

## Grading Scale

| | |
|---|---|
| **90% - 100%** | **4.0** |
| **85% – 89.99%** | 3.5 |
| **80% – 84.99%** | 3.0 |
| **75% – 79.99%** | 2.5 |
| **70% – 74.99%** | 2.0 |
| **65% – 69.99%** | 1.5 |
| **60% – 64.99%** | 1.0 |
| **Below 60%** | 0.0 |

## Extra credit

Throughout this semester, you have an opportunity to earn bonus points toward your grade in ADV 442 (Digital Analytics). This bonus research participation is worth 5% in this course. To earn these credits, you will need to complete five (5) hours of research participation. You may do this one of two ways (or through a combination of options A and B below). Note that you can earn UP TO 5% of the grade, which is the maximum limit, but, if you wish, you may earn less than that.

❖ **Option A.** You may sign-up for studies using the SONA system (https://msucas.sona-systems.com). The SONA system allows you to look at active studies that require research participants, view available time slots, and select a time slot that best suits your schedule. Researchers will also use the SONA system to award you SONA credits in exchange for participation. SONA credits are awarded on the basis of how long each study takes. One-hour studies earn you 1 SONA credit (which is equal to 1% in this class). Half hour studies earn you half a SONA credit. Please be aware that this option closes **on June 21, 2019, at 5 pm (EST)** and no additional research opportunities will be available after that date.

❖ **Option B.** If you do not wish to participate in the studies advertised on the SONA system, please contact the instructor regarding alternative research assignments or other activities. You may complete alternative assignments/activities to earn bonus points in this course. These alternative assignments are valued and credited in the same manner as studies advertised on SONA. Specifically, your instructor will award one "alternative credit" (which is equal to 1% in this class) for what she believes constitutes work that would take one hour of your time to complete. Please be aware that this option must be requested by **May 31, 2019, (EST)** this semester and no additional opportunities will be made available after that date. Requests received before

**May 31, 2019,** will be granted and those projects will be due **on June 21, 2019, at 5 pm (EST)**.

## Student responsibilities

**SUBMIT ORIGINAL WORK:** See information about academic honesty and integrity below.

**MEET ALL DEADLINES:** You are expected to submit each assignment before deadlines. If you submit an assignment/quiz late without a legitimate reason, you will have 24 hours from the deadline to submit it for 70% of the grade. If the assignment is not submitted within 24 hours after the deadline, you will receive zero (0) on it. You will receive detailed instructions for each assignment in class, through D2L, or by email. Expect individual as well as group assignments and manage your time accordingly.

**MAKE-UPS:** No make-up assignments will be given unless for a legitimate reason. Legitimate reasons are limited to personal illness, death of an immediate family member, MSU-related business travel, and the like. In such cases, the student is responsible to inform the instructor (at a reasonable time before the quiz) and provide the appropriate documentation. The instructor has the right to judge the legitimacy of any proposed reason.

**COMPLETE ALL ASSIGNMENTS & BACK UP:** Keep copies of your work to protect both of us from lost assignments or computer problems.

**ENSURE INTERNET CONNECTION:** As this course uses multiple tools available online, not having access to the Internet is not a good excuse for late or missed assignments and quizzes.

**CHECK EMAIL EVERY DAY:** Checking email every day is highly recommended to ensure you keep track of course schedule changes and other announcements, if any.

**READ, WATCH, LISTEN, DO:** Before the beginning of each lecture, complete readings and other assigned activities (e.g., tutorial videos, free account sign-ups, listening to audio materials).

**RESPECT:** be respectful to instructor(s), other students, and guest speakers if any.

**ATTEND:** You should come to each class (on time!) prepared to discuss the assigned readings and other course material. You are expected to be an active participant in class. Regular attendance will help you complete the in-class exercises and earn participation points. In-class exercises will be provided in almost each session, so attending is important. If a class is missed, you will lose points for in-class exercises unless you have a valid excuse for your absence. If you arrive more than 20 minutes late or leave more than 20 minutes before the end of class, you will *not* receive credit for that day.

**DO NOT SHARE:** Do not share the content of this course with anyone outside classroom and university. Failure to comply with this university policy may be considered to be violations of intellectual property. You must be aware that any class materials distributed at MSU are **the intellectual property of the university.** Sharing these materials offline and online with anyone who is not enrolled in the class this semester will have legal consequences. Note that sharing

class information, such as slides, quiz and exam questions and answers, media plans, etc., is not acceptable in this and any other course.

## Technology in the classroom

Please bring your laptop to class every session. Your laptop should have access to **Powerpoint**, the latest version of **Excel** (*it is preferred that you install this software on your computer*) and the **Chrome** web browser. However, use of laptops and other devices during class time should be restricted to class-related activities only. It is important that you stay engaged with your fellow students during class time (we all notice when those around us are distracted by personal device use). You should expect that the instructor <u>will</u> ask you to take out and put away your laptop during different parts of class. Make sure you have pen and paper available to take notes. Likewise, the use of other mobile devices, such as smartphones and tablet computers, is not allowed for purposes other than the purposes of this course.

## Class management system (D2L)

You can submit your assignments and download the readings and this syllabus on Desire2Learn (D2L) class management website (https://d2l.msu.edu). Your grades will be uploaded to D2L, as well.

## Academic Conduct

"*As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do.*"

ASMSU Spartan Code of Honor

As members of a learning community, students are expected to respect the intellectual property of course instructors. All course materials presented to students are the copyrighted property of the course instructor and are subject to the following conditions of use for this course:
1. Students may not record lectures or any other classroom activities without the prior written consent of the instructor.
2. Students may not share the recordings with other students enrolled in the class.
3. Students may not post the recordings or other course materials online or distribute them to anyone not enrolled in the class without the advance written permission of the course instructor and, if applicable, any students whose voice or image is included in the recordings.
4. Any student violating the conditions described above may face academic disciplinary sanctions.

Cheating on exams includes obtaining assistance from other people, giving assistance to others or using any aids (e.g., looking at another person's answer sheet or exam, using notes, exchanging exams, texting, talking, or having another person take the exam for you). All electronic devices – smartphones, tablets, laptops - must be turned OFF during exams. Smart watches are not allowed on exam days. Cheating on written work or extra credit tasks and papers includes falsifying or inventing data, plagiarism from books, websites, or the work of others, signing in other students or helping others to cheat or plagiarize. All of these offenses will be punished to the limit of university policy.

**Disability Accommodation:** Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc). Requests received after this date will be honored whenever possible.

# Course Schedule

*This syllabus is subject to change - and probably will change - based on the progress of the class or other events. Changes will be announced in class and via email. **Readings should be completed by the class period where they are listed.***

# WEEK 1

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| ***Monday, May 13*** | | |
| Introduction to the course<br><br>Introduction to digital analytics: The role of digital analytics in advertising | Read the syllabus | Sign-up for Facebook page Digital Analytics<br><br>In-class case study analysis and discussion (in-class exercise) |
| ***Wednesday, May 15*** | | |
| Why and how is data analytics useful<br><br>Data privacy and ethics | Read:<br><br>1) This Marketing Pro Practiced His Facebook Ad Targeting by Making His Roommate Completely Paranoid*<br><br>2) The key moments from Mark Zuckerberg's testimony to Congress**<br><br>3) Browse the website of the EU General Data Protection Regulation***<br><br>4) Charles Duhigg, "How Target How Target Knows What You Want Before You Do – When Companies Predict (and Manipulate) Habits" from "The Power of Habit" (D2L) | In-class exercise<br><br>Watching "Do not track" |

\* http://www.adweek.com/digital/roommate-makes-his-friend-paranoid-creepy-facebook-ads-160320/
\*\* https://www.theguardian.com/technology/2018/apr/11/mark-zuckerbergs-testimony-to-congress-the-key-moments
\*\*\* https://www.eugdpr.org/

# WEEK 2

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| **Monday, May 20** | | |
| Client introduction (setting objectives) TBA<br><br>Audience analytics<br><br>Audience analysis tools (Nielsen, Mintel, Simply, Google Trends, Pew, and others) | Read:<br><br>1) Tuten & Solomon, Ch. 3, "Social Consumers" (D2L)<br><br>2) Heman & Berbary, Ch. 6, "Audience analysis" (D2L)<br><br>3) Facebook, Measurement Partners Get to Work* | Final group project distributed<br><br>In-class exercise |
| **Wednesday, May 22** | | |
| Client introduction (setting objectives) TBA<br><br>Audience analytics (continued)<br><br>Audience analysis tools (Nielsen, Mintel, Simply, Google Trends, Pew, and others) | … continued readings from May 20 | In-class exercise<br><br>Homework assignment # 1 distributed |

* http://www.adweek.com/digital/facebook-measurement-partners-update/

# WEEK 3

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| **Monday, May 27** | | |
| MEMORIAL DAY: NO CLASS | | |
| **Wednesday, May 29** | | |
| Using Excel: The basics<br><br>Using NetVizz (download the app on your Facebook page) | Watch video tutorials about Excel and Netvizz use on YouTube* (see the links below this table) | Download Netvizz app on your Facebook<br><br>In-class exercise |

**\* Links to video tutorials about Excel and Netvizz use:**
- Sum functions in Excel: https://www.youtube.com/watch?v=SBmLmBA3-xA&list=PLEnzfKTlR3lPa_XZdwfJh7V8Krzb1SJDj&index=2
- Creating averages in Excel: https://www.youtube.com/watch?v=9Ye45qRwOcY
- How to filter in Excel: https://www.youtube.com/watch?v=OUrdTtHMHJQ&list=PLEnzfKTlR3lPa_XZdwfJh7V8Krzb1SJDj&index=4
- Creating a chart in Excel: https://www.youtube.com/watch?v=_Wu7jYTr1Pk
- Using the weeknum function (we'll need this when we start to look at engagement numbers over time) in Excel: https://www.youtube.com/watch?v=QuIjaYBu130
- Downloading and using Netvizz: https://www.youtube.com/watch?v=LqbmbEsimgY

# WEEK 4

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| **Monday, June 3** | | |
| Social media analytics | Read:<br><br>1) Tuten & Solomon Ch. 4, Network structure and group influence in social media (D2L)<br><br>2) Think You Understand Why Ideas Go Viral? Big Data May Change Your Mind*<br><br>3) How a social media analyst approaches data** | In-class exercise<br><br>Login to Meltwater account<br><br>**Homework assignment # 1 DUE** |
| **Wednesday, June 5** | | |
| Identifying influencers on digital platforms<br><br>Social listening<br><br>Introduction to Meltwater | Read:<br><br>1) How to identify your social media influencers***<br><br>2) Beginner's guide to advertising on Facebook****<br><br>Watch:<br>1) Facebook advertising tutorials*****<br>• Targeting: Core audiences; Targeting: Custom audiences; Targeting: Lookalike audiences; Boost your posts; Power editor (advanced advertisers); Measure campaign performance with ads; Audience insights; Reporting and analytics learning path<br><br>1) Social listening, what it is…******<br><br>2) Meltwater training video (D2L) | In-class exercise<br><br>Homework assignment # 2 distributed<br><br>Login to Meltwater account<br><br>Signed up for Google analytics demo account |

\* https://insight.kellogg.northwestern.edu/article/big-data-looks-at-why-ideas-go-viral
\*\* https://simplymeasured.com/blog/6-ways-a-social-media-analyst-approaches-social-data/#sm.0001m52xmdvs5fs310wawytcet82g v
\*\*\* https://sproutsocial.com/insights/social-media-influencers/
\*\*\*\* https://blog.hootsuite.com/how-to-advertise-on-facebook/
\*\*\*\*\* https://www.facebookblueprint.com/
\*\*\*\*\*\* https://blog.hootsuite.com/social-listening-business/

# WEEK 5

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| **Monday, June 10** | | |
| Web analytics<br><br>Introduction to Google Analytics | Read:<br><br>1) Kaushik, Ch. 3, "The awesome world of clickstream analysis: metrics" (D2L)<br><br>Watch:<br><br>2) Google Analytics Academy videos* | In-class exercise<br><br><span style="color:red">You must be signed up for Google analytics demo account</span> |
| **Wednesday, June 12** | | |
| Web analytics<br><br>Introduction to Google Analytics<br><br>(continued) | 3) Advanced Google Analytics videos** | In-class exercise<br><br>**<span style="color:red">Homework assignment # 2 DUE</span>**<br><br>Homework assignment # 3 distributed |

**\*Links to Google Analytics Videos:**
- Introduction: https://www.youtube.com/watch?v=GG5xBwbje1E&index=2&list=PLI5YfMzCfRtZU5Qwzx57HjmZyNE2o5YDN
- Overview of data collection: https://www.youtube.com/watch?v=RIcC_iiE-O0&index=4&list=PLI5YfMzCfRtZU5Qwzx57HjmZyNE2o5YDN
- Audience reports: https://www.youtube.com/watch?v=Bsc_7WEcgRE&index=3&list=PLI5YfMzCfRtZU5Qwzx57HjmZyNE2o5YDN
- Acquisition reports: https://www.youtube.com/watch?v=ywqDRj9nEjQ&index=10&list=PLI5YfMzCfRtZU5Qwzx57HjmZyNE2o5YDN
- Behavior reports: https://www.youtube.com/watch?v=t7unUhwwN7I&index=11&list=PLI5YfMzCfRtZU5Qwzx57HjmZyNE2o5YDN

**\*\* Links to advances Google Analytics videos:**
- How to create a measurement plan: https://www.youtube.com/watch?v=PTbS7-YQ2e0&list=PLI5YfMzCfRtYPbAhaAMHtSOO_ZS-cmW22&index=6
- Introduction to segmentation: https://www.youtube.com/watch?v=o0XWcn7hRGw&index=19&list=PLI5YfMzCfRtYPbAhaAMHtSOO_ZS-cmW22
- Introduction to remarking: https://www.youtube.com/watch?v=B4lkgkWQuDM&index=22&list=PLI5YfMzCfRtYPbAhaAMHtSOO_ZS-cmW22

# WEEK 6

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| **Monday, June 17** | | |
| Search analytics<br><br>    Google micro-moments<br>    Google Genomics<br><br>Mobile analytics<br><br>Data visualization tips and tools<br><br>    SimplyAnalytics, Nielsen's PRIZM, Mintel, Excel | Read: TBA<br><br>1) Hemann & Burbary, Ch. 5, "Search analytics" (D2L)<br><br>2) How Micro-Moments are Changing the Rules*<br><br>3) Google is Giving AI That Can Build Your Genome Sequence**<br><br>4) Knaflic, Ch. 2, "Choosing an effective visual" and Ch. 3, "Clutter is your enemy" (D2L) | In-class exercise |
| **Wednesday, June 19** | | |
| Competitive analysis<br><br>    Market Share Reporter<br>    Ad$pender | Read:<br><br>1) How to do digital competitive analysis***<br><br>2) How to do a competitive analysis**** | In-class exercise<br><br>**Homework assignment # 3 DUE** |

\* https://www.thinkwithgoogle.com/marketing-resources/micro-moments/how-micromoments-are-changing-rules/

\*\* https://www.wired.com/story/google-is-giving-away-ai-that-can-build-your-genome-sequence/

\*\*\* https://trackmaven.com/blog/how-to-do-a-competitive-analysis-digital-marketing/

\*\*\*\* https://www.rivaliq.com/blog/ultimate-social-media-competitive-analysis-template/

# WEEK 7

| Day and topic | What to do BEFORE class | Assignments distributed and due |
|---|---|---|
| *Monday, June 24* | | |
| Client group project presentations<br><br>Concluding remarks | Prepare for the presentations | Final group project is DUE<br><br>CLIENT PROJECTS PRESENTATIONS<br><br>15 minutes per presentation + 5 minutes of discussion per project |
| *Wednesday, June 26* | | |
| Exam review (12:40 – 1:20 pm)<br><br>Final exam (1:30 – 3:30 pm) | Prepare for the exam | Final exam |

# DATES TO REMEMBER

**MAY 20 or May 22** – client introduction

**JUNE 3** – homework assignment #1 due

**JUNE 3 and 5** – sign up for the Meltwater account

**JUNE 5 and 10** – sign up for a demo Google Analytics account

**JUNE 12** – homework assignment #2 due

**JUNE 19** – homework assignment #3 due

**JUNE 21** – SONA system closes research participation opportunities at 5 pm (EST)

**JUNE 24** – project document is due + client presentations

**JUNE 26** – final exam 1:30 to 3:30 pm (EST)