USCAnnenberg

**JOUR 477: Web Analytics for News
                    and Nonprofit Organizations
2 units**

Fall 2016:	Tuesdays, 12-1:50 p.m.
Section:	21315R
Location:	ASC 240
Instructor:	Dana Chinn, Lecturer
Office:	ASC 227
Office Hours:	By appointment:
	Tuesdays, 2-4 p.m.
	Wednesdays, 12-3 p.m.
	Thursdays
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I. Course Description

This course will give you a foundation for using web traffic data to help news and nonprofit organizations measure and understand their impact on audiences.

Web - or digital - analytics is an essential tool used by journalists, website managers, communications directors and others who need to make data-driven decisions about site content, design and marketing. "Chief audience officer" and "audience analyst" are just two positions, new to many newsrooms, focused on tapping into the power of digital analytics, big data and data science that e-commerce companies have used for years.

This course will focus on content- or mission-based sites, or sites in which success is measured by whether stories and other content are building and retaining audiences. This is in contrast to e-commerce sites, where the primary goal is usually direct sales.

Both types of sites, however, use the same tools. You will have direct access to the Google Analytics accounts and Facebook Insights data for a number of news and nonprofit organizations. Each week you will get hands-on experience with different types of metrics that help answer questions crucial to an organization's survival. In addition to learning about basic web metrics, you'll spend a large chunk of time on search engine optimization or SEO metrics. You'll also take a look at Facebook metrics.

You will use Excel and PowerPoint extensively, and learn about industry best practices in data visualization. In-class workshops and weekly assignments will help you learn (or learn more about) these tools and techniques at your own pace.

II. Overall Learning Objectives and Assessment

After completing this course, you will know how to use the basic metrics and functions in Google Analytics, Google Search Console and Facebook Insights, and will understand how to explain basic digital metrics in a report for managers at a news or nonprofit organization.

You will:
- Identify the mission of a journalism or nonprofit organization to inform questions about how content, design and marketing can build and retain audience engagement.

- Recognize which metrics are relevant given a specific question about content, design and marketing.
    - Sessions, users, pageviews
    - Site-level vs. story-level metrics
    - Site vs. page bounce rate, pages per session, attention minutes
    - Search engine keyword clicks and impressions
    - Facebook Page-level and post-level metrics

- Identify target audiences using metrics that describe the impact of media on them.
    - New vs. returning users
    - Users from specific geographic areas
    - Users who email, share, comment or take other behavioral, measurable actions after reading a story

- Use accurate language and data visualizations to interpret and summarize media metrics data.

III. Description of Assignments
Homework assignments will usually fall into one of two categories:
- Multiple-choice and short-answer homework assignments on Blackboard to assess your knowledge and understanding of terms and concepts.

    Some of these assignments will also require you to get data from Google Analytics, perform calculations in Excel and/or put the data in a chart or table.

- An infographic that consists of one or more charts, tables and/or screenshots with summary or explanatory text and/or annotations.

We will usually complete a sample homework assignment together in class. Two of the 12 homework assignments are group assignments.

The final project is a report with infographics that summarizes your review of the metrics you've identified as the most important for a specific organization to use.

Confidential information
Throughout the semester you will have direct access to the Google Analytics accounts and other digital data for a variety of news and nonprofit organizations. This is internal, proprietary data. Thus, all data, assignments, projects and discussions are confidential. You can show prospective employers your assignments and projects if you strip out all identifying information.

IV. Grading
a. Course Grade Breakdown

Homework assignments
       Assignments 1 & 2   Pass/Fail
       Assignments 3-12   **70%**

Final project   **30%**

Total   **100%**

b. Grading Scale

A	95-100	B+	87-89	C+	77-79	D+	67-69
A-	90-94	B	83-86	C	73-76	D	63-66
		B-	80-82	C-	70-72	D-	60-62
						F	59 and below

c. Grading Standards

A
The analysis is relevant, uses the correct data and is concise and complete. It identifies any assumptions that were used, data integrity issues, and issues that need to be further addressed (if any) before a manager can make a decision.

The analysis is targeted to a managerial audience, is clearly written and is free of spelling and grammatical errors. It includes relevant charts and graphs with explanatory text. There are no 3D or other types of graphs in formats that obscure the trends or data points. It uses the correct colors, data labels and font size, and has a plain white or otherwise unobtrusive background. The analyses are in a hard copy format suitable for discussion at a meeting.

B
The analysis is relevant, uses the correct data and is complete. It identifies assumptions that were used, data integrity issues, and issues that need to be further addressed (if any) before a manager can make a decision. The report and presentation have most, but not all, of the attributes of an "A" assignment.

C
The analysis is relevant and uses the correct data, but isn't complete; it's a recitation of facts rather than an analysis. It can be used for decision-making if a manager could deduce some of the issues on his/her own. The report and presentation have some of the attributes of an "A" assignment.

D
The analysis is relevant, but doesn't use the correct data and isn't complete. It needs further work before it can be used for decision-making. The report and presentation have only a few of the attributes of an "A" assignment.

F
The analysis isn't relevant, doesn't use the correct data and isn't complete.   The report and presentation doesn't have any of the attributes of an "A" assignment.

V. Assignment Submission Policy
Assignments are due on Blackboard before the beginning of each class.

Late assignments
Late assignments will be accepted at any time in the semester but a full letter grade will be deducted regardless of the reason for the late submission.

VI. Readings and Supplementary Materials
Readings will be posted on Blackboard weekly. There are always changes and new insights in analytics, so many of the readings are not posted in the course schedule in this syllabus.

The lectures and grading standards will draw heavily from the following:

- Materials published by the USC Annenberg Media Impact Project: "Understanding Media Metrics" and "Measuring Digital Media Impact 101"

- Avinash Kaushik, Analytics Evangelist, Google, and advisory board member, Media Impact Project
  - Web Analytics An Hour a Day, Sybex/Wiley Publishing, 443 pages
  - Web Analytics 2.0, Sybex/Wiley Publishing, 475 pages
  - Occam's Razor, http://www.kaushik.net

- "Numbers in the Newsroom: Using Math and Statistics in News," Second Edition, E-version, by Sarah Cohen for Investigative Reporters and Editors, Inc., 2014, 134 pages. Available via the IRE website store at store.ire.org.

- "The Wall Street Journal Guide to Information Graphics: The Dos & Don'ts of Presenting Data, Facts, and Figures," by Dona M. Wong, W.W. Norton, 2010, 158 pages.

- Short explanatory videos on my YouTube channel from Google, practitioners, and me - http://www.youtube.com/danachinn or use the link in the Readings and Videos section in Blackboard

VII. Required Tools, Readings and Materials

1. **Laptop (PC or Mac)**
   Please bring your laptop to every class.

2. **Microsoft Office 2016** (Word, Excel, PowerPoint) is available for free to USC students at itservices.usc.edu/officestudents. I will be using Office 2016 (PC and Mac) for lectures, handouts and in-class demos.

   The assignments and the final project must be in Excel and PowerPoint, which are industry standards. Analysts collaborate across departments and organizations and almost always have to hand off their files. If you use Numbers, Keynote, Google Docs, Prezi or other software, you'll need to convert your files and fix any formatting problems that happen during the conversion process.

VIII. Course Schedule

Full assignment descriptions and grading rubrics will be distributed each week.
All assignments are to be completed and/or posted on Blackboard.

Guest speakers will be scheduled during the semester.

Week	Topics	Readings on Blackboard	Homework due the following week
1	**Course overview** **What is digital analytics?**	Chapters on the purpose and history of web/digital analytics by Avinash Kaushik	**Assgn. 1** (multiple choice and short answer exercise on Blackboard) • Skills and interests survey • Qualitative observations about the class websites **If needed:** • Update to Office 2016 • Basic Excel tutorials on Lynda.com
2	**Measurement models:** **What metrics matter?** • Mass media vs. digital media audiences • Defining target audiences, content topics, and site goals • Behavioral vs. attitudinal research **Google Analytics Audience Overview metrics 1** • Sessions, users, pageviews • Pages per session, site bounce rate • Trends vs. totals **Excel** • Percentages and ratios; rounding and formatting; copy/paste; auto-fill • Writing with metrics	"Web Metrics for Journalists," by the USC Media Impact Project Metrics definitions on the Google Analytics Help site Google Analytics Academy Lesson 3.2	**Assgn. 2** (multiple choice and short answer exercise on Blackboard) • Compare and contrast the missions and target audiences of SCPR/KPCC and the Texas Tribune vs. other news organizations. • Calculate and describe the trends for each org during the specified time period using Google Analytics Audience Overview metrics.

Week	Topics	Readings	Homework due the following week

3	**What happened with the most important target audiences?**
	
	Google Analytics Audience Overview metrics 2
	• Google Analytics overview
	  o Metrics by day vs. week
	  o Exporting to Excel
	• Segmenting sessions
	  o Total sessions vs. sessions from new vs. returning users
	  o Total sessions vs. sessions from targeted geographic regions
	
	Excel
	• Converting raw .csv files
	• Combining multiple files into one workbook
	• Labeling columns accurately
	• Averages vs. medians; range (highest/lowest);
		"Web Metrics for Journalists," by the USC Media Impact Project
		
		Metrics definitions on the Google Analytics Help site
		
		Google Analytics Academy videos
			Assgn. 3 (Screenshots plus explanatory text in a PowerPoint file)
			• Calculate and describe the trends for each org during the specified time period using Google Analytics Audience Overview metrics.
			  o Total vs. new vs. returning
			  o Total vs. a targeted geographic region

4	**What stories drove traffic and kept people on the site?** **Google Analytics Behavior/Site Content metrics – Part 1** • Pageviews vs. unique pageviews • Avg. time on page vs. attention minutes (Google Tag Manager) • Entrances and exits • Site bounce rate vs. page bounce rate	"Story-level metrics," from the "Measuring Digital Media Impact 101" workbook by the USC Media Impact Project Google Analytics Academy videos	**Assgn. 4** (multiple choice and short answer exercise on Blackboard) • Describe the top content drivers for each org during the specified time period using Google Analytics Behavior/Site Content metrics. Distinguish between pages, section fronts and stories as needed.

Week	Topics	Readings	Homework due the following week
5	**What stories drove traffic and kept people on the site?** **Google Analytics Behavior/Site Content metrics – Part 2** • Finding URL groupings in site architecture • Topic taxonomies • Grouping, categorizing and analyzing stories by page type and topic **Excel** • Setting a named range; using filters; sorting • Calculating group bounce rates	"Story-level metrics," from the "Measuring Digital Media Impact 101" workbook by the USC Media Impact Project Google Analytics Academy videos	**Assgn. 5** (Table plus explanatory text in a PowerPoint file) • Calculate and describe the performance (or lack) of the most important content groups for one org.
6	**How did people get to the site? What channels were the most effective in keeping people on the site?** **Google Analytics Acquisition traffic source metrics** • Organic vs. paid search • Direct traffic • Referral and social media sites • Email newsletters **PowerPoint** • Vertical bar chart with table	Google Analytics Academy videos	**Assgn. 6** (multiple choice and short answer exercise on Blackboard) • Arrange the Google Analytics Acquisition metrics in a vertical bar chart and table. • Referring to your chart and table, describe the differences between traffic sources using Google Analytics Acquisition metrics.

Week	Topics	Readings	Homework due the following week
7	**When people came to the site, what did they see first, and then what did they do?** **Google Analytics Behavior/Site Content metrics – Part 2** • Story traffic sources • Landing page bounce rate • Emails, shares, comments	To be determined	**Assgn. 7** (Table plus explanatory text in a PowerPoint file) • Adding on to Assgn. 5, calculate and describe the performance (or lack) of the most important content groups for one org.
8	**What should we report to our board and senior management?** • Sessions: Total vs. sessions from new and returning users • Sessions: Total vs. sessions from targeted geographic regions • Traffic sources • Stories/content **PowerPoint** • Line vs. stacked line charts	"Quarterly reports," from the "Measuring Digital Media Impact 101" workbook by the USC Media Impact Project	**Assgn. 8** (Annotated line charts with explanatory text in a PowerPoint file) • Building on previous assignments, describe the trends in sessions and identify the top performing stories, traffic sources and stories/content with the relevant metrics.

9	**Search Engine Optimization: Are people finding our most important stories through search engines?**
	
	Google Search Console organic search keyword metrics
	• Grouping keywords
	    o Branded vs. unbranded
	    o Topics
	• Clicks, impressions, position
	
	Excel
	• Pivot tables
		To be determined	**Assgn. 9** (Multiple choice and short answer exercise on Blackboard)
			• Describe the top branded and unbranded keywords for each org using Google Search Console keyword metrics.

Week	Topics	Readings	Homework due the following week
10	**SEO workshop** **In-class group assignment** • Code for branded vs. unbranded • Code by topic • Summarize with pivot tables	To be determined	**Assgn. 10** (group assgn.) • Classify, calculate and describe what types of keywords are driving search engine traffic. • Identify what types of keywords important to an org are needed
11	**SEO: What keywords should an org buy?** **Google AdWords metrics** • Clicks, impressions • Components of ad Quality Scores: expected click-through rate, ad relevance, landing page experience	To be determined	**Assgn. 11** (group assgn.) • Sketch a Google AdWords campaign for one type of keyword important to an org
12	**What's working – and what's not – on our Facebook Page?** **Facebook Insight metrics** • Page-level metrics • Post-level metrics	To be determined	**Assgn. 12a** (multiple choice and short answer exercise on Blackboard) • Describe how an org's Facebook Page has performed.
13	**Is Facebook doing what we want it to do?** **Sources of Facebook metrics** • Sessions from Facebook • Facebook Recommends • Facebook Page metrics	To be determined	**Assgn. 12b** (Line chart with explanatory text) • Describe what an org does with Facebook and what the different types of metrics indicate
14	**What happened?** **What do we do now? Why?** **Final project overview** • Review of the past year • Suggested Key Performance Indicators • Examples of changes in content, design and marketing to try		**None**
15	**Final project workshop**		

The final project is due via Blackboard on Tuesday, December 13, 2016, 5 p.m.

IX. Policies and Procedures

Internships
The value of professional internships as part of the overall educational experience of our students has long been recognized by the School of Journalism. Accordingly, while internships are not required for successful completion of this course, any student enrolled in this course that undertakes and completes an approved, non-paid internship during this semester shall earn academic extra credit of one percent of the total available semester points for this course. To receive instructor approval, a student must request an internship letter from the Annenberg Career Development Office and bring it to the instructor to sign by the end of the third week of classes. The student must submit the signed letter to the media organization, along with the evaluation form provided by the Career Development Office. The form should be filled out by the intern supervisor and returned to the instructor at the end of the semester. No credit will be given if an evaluation form is not turned into the instructor by the last day of class. Note: The internship must by unpaid and can only be applied to one journalism class.

Statement on Academic Conduct and Support Systems
a. Academic Conduct
Plagiarism
Presenting someone else's ideas as your own, either verbatim or recast in your own words - is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards*
https://scampus.usc.edu/b/11-00-behavior-violating-university-standards-and-appropriate-sanctions/.
Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

USC School of Journalism Policy on Academic Integrity
The following is the USC Annenberg School of Journalism's policy on academic integrity and repeated in the syllabus for every course in the school:

"Since its founding, the USC School of Journalism has maintained a commitment to the highest standards of ethical conduct and academic excellence. Any student found plagiarizing, fabricating, cheating on examinations, and/or purchasing papers or other assignments faces sanctions ranging from an 'F' on the assignment to dismissal from the School of Journalism. All academic integrity violations will be reported to the office of Student Judicial Affairs & Community Standards (SJACS), as per university policy, as well as journalism school administrators."

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course or Learning Lab, without approval of the instructor.

b. Support Systems
Equity and Diversity
Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* http://dps.usc.edu/contact/report/. This is important for the safety of the whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage https://sarc.usc.edu/ describes reporting options and other resources.

Support with Scholarly Writing
A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://ali.usc.edu/ which sponsors courses and workshops specifically for international graduate students.

The Office of Disability Services and Programs
http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations.

Students requesting test-related accommodations will need to share and discuss their DSP recommended accommodation letter/s with their faculty and/or appropriate departmental contact person at least three weeks before the date the accommodations will be needed. Additional time may be needed for final exams. Reasonable exceptions will be considered during the first three weeks of the semester as well as for temporary injuries and for students recently diagnosed. Please note that a reasonable period of time is still required for DSP to review documentation and to make a determination whether a requested accommodation will be appropriate.

Stress Management
Students are under a lot of pressure. If you start to feel overwhelmed, it is important that you reach out for help. A good place to start is the USC Student Counseling Services office at 213-740-7711. The service is confidential, and there is no charge.

Emergency Information
If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* http://emergency.usc.edu/ will provide safety and other updates, including ways in which instruction will be continued by means of Blackboard, teleconferencing, and other technology.

About Your Instructor
I am a full-time faculty member at Annenberg who focuses on digital analytics and open data. I am the director of the Norman Lear Center's Media Impact Project, which is funded by the Bill & Melinda Gates Foundation, Knight Foundation, and Open Society Foundations. MIP works with organizations worldwide to advance the field of media metrics and help media organizations use data for decision-making.

This semester, in addition to teaching JOUR 477/Web Analytics for News and Nonprofit Organizations, I'm teaching JOUR 322/Data Journalism and DSO 599/Digital Analytics Strategy at the Marshall School of Business Data Sciences and Operations department.

I have an undergraduate degree in journalism and an MBA, both from USC. I continue to work with various nonprofit news organizations and e-commerce companies as a consultant, and previously worked at Gannett, the Los Angeles Times and other media organizations in strategic planning, marketing and finance.