I. Course Description
This course will give you a foundation for using web traffic data to manage a web site for a news or nonprofit organization. You’ll learn how to use metrics to inform the decisions you’ll make in roles such as website manager, social media producer, and communications director.

II. Overall Learning Objectives and Assessment
In this course you will learn to:

- Define target audiences for a news organization and a nonprofit organization, and explain why some traffic is more important than others.

- Describe and compare the conceptual purpose, technical definitions, limitations and assumptions of various types of behavioral metrics:
Basic content consumption metrics and segments:
Visits/sessions; visits/sessions from new vs. returning visitors; visits/sessions by geographic region. Weak and misused metrics: page views; unique visitors; time spent on site.

Visitor acquisition metrics:
Visits by traffic source (direct, search, referring sites, Facebook, Twitter, campaigns); keywords.

Visitor behavior metrics:
Bounce rates; landing pages; pages per visit; verbs of online actions; frequency and recency.

Outcome metrics:
Macro- vs. micro-outcomes or conversions. Funnels.

Facebook metrics:
Page Likes vs. post likes; daily engaged users.

• Find data and create custom segments in Google Analytics.
• Use Microsoft Excel for basic quantitative analysis to interpret the data, put it into context and reveal the insights needed for recommendations.
• Use Microsoft PowerPoint to create charts (pie, bar and line graphs) and infographics to tell a story with data.

Throughout the semester you will have direct access to the Google Analytics accounts for a variety of news and nonprofit organizations to complete your homework assignments.

Your final project will be an analysis of the basic web metrics for one of the organizations discussed during the semester.

III. Description of Assignments
The assignments will assess your knowledge of metrics specific to news and nonprofit organizations, your proficiency with the software tools, your ability to analyze data, put it into context and use it to formulate recommendations.

Assignment and final project components
The assignments require you to take one or more of the following steps.
The final project requires all of the steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>What you need to know</th>
<th>Grading criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>State the question about an opportunity or a problem that needs to be answered.</strong></td>
<td>An organization's strategy, or what it's trying to do and how it's trying to do it</td>
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<tr>
<td>2</td>
<td><strong>Identify the data or metrics that will help answer the question.</strong></td>
<td>How site traffic data is gathered, what metrics exist, what a specific metric does or doesn't indicate. How data can be segmented, or grouped.</td>
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<td>3</td>
<td><strong>Get the data from Google Analytics or other sources.</strong></td>
<td>Where to find the metrics you want. What default data is available, and what is available from other tools or if the tracking code is customized.</td>
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<td>4</td>
<td><strong>Clean and organize the data using Excel and other tools.</strong></td>
<td>Basic database design, or how data should be put in a spreadsheet so it can be coded systematically and consistently with categories relevant to the org and the question.</td>
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<td>5</td>
<td><strong>Analyze the data using Google Analytics, Excel and PowerPoint.</strong></td>
<td>The quantitative calculations and qualitative assessments needed to compare, contrast and put the data into</td>
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<td>6</td>
<td>Present relevant, data-based findings and recommendations understandable to decision-makers.</td>
<td>How your findings relate to the question.</td>
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<td>What data is missing that affects the strength and validity of your argument; what data is immaterial and thus not included.</td>
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<td></td>
<td></td>
<td>What tables, charts, graphs, infographics and formats present the data correctly and effectively.</td>
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<td>Terms the organization uses.</td>
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<td></td>
<td>Grammar, punctuation, spelling.</td>
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<td>Have all differences (e.g., the amount and the percentages) and outliers been put into context and interpreted appropriately?</td>
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<td>Have both the trends over time and the totals been considered?</td>
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<td>Is the question clearly stated and linked to the org's strategy?</td>
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<td>Are there findings drawn from multiple data points, not just basic calculations?</td>
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<td>Are the findings worded with the terms the org uses?</td>
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<td>Are hypotheses stated as such rather than as fact?</td>
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<td>Are any limitations or problems with the data identified?</td>
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<td>Are the recommendations based on the findings rather than personal opinion?</td>
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<td>Is the data in tables, charts and graphs presented properly and cleanly with no typos, confusing sentences, visual tricks or extra colors to distract from the info?</td>
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**GRADING CRITERIA**

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.
Each homework assignment will usually be worth 100 points.

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

IV. Grading Breakdown

Homework assignments  
Assignments 1-4 combined    15%
Assignments 5-9: 10% each    50%

Basic metrics test           15%

Final project                20%

Total                        100%

Confidential information
This course uses internal, proprietary data. All data, presentations and discussions in class, with your fellow students and with the organizations are confidential. You can show interviewers and employers your assignments and projects in person but you can't give them a copy unless you strip out all identifying information.

V. Assignment Submission Policy
Assignment files are due on Blackboard before the beginning of each class. You can also e-mail them to me at chinn@usc.edu if you have trouble posting them on Blackboard.

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.

**LATE ASSIGNMENTS**
Homework assignments are due on Blackboard or via e-mail to me before class starts. Late assignments will not be accepted for the assignments whose answers we review at the beginning of class. Partial credit will be given for incomplete assignments turned in on time. A full letter grade will be deducted for each day the final project is late.

**VI. Required Readings and Supplementary Materials**

1. **Required readings**
The required readings include handouts I’ll distribute in class and post on Blackboard. The readings will come from the books and pamphlets below and from whitepapers, blogs and analytics vendor sites from both media and e-commerce.

   - "Understanding Media Metrics" - Guides published by the USC Annenberg Media Impact Project

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


2. **Required videos**
I will be posting short explanatory videos on my YouTube channel (http://www.youtube.com/danachinn or use the link in the Readings and Videos section in Blackboard) that will demonstrate some of the Google Analytics, Excel and PowerPoint techniques
explained in class and required for the assignments. Some of the videos are publicly available, but most are private to the class as they include propriety data.

If you need more basic instruction on Excel and PowerPoint, you have access to an extensive library of Lynda.com tutorial videos through Blackboard.

You are welcome to e-mail me during the week with any question about the homework assignment, technical or otherwise. The software we use can be very quirky, and sometimes is frustrating even for me. I don't want you to spend hours and hours with the tools, especially with PowerPoint. I'd rather have you focus on the analysis!

VII. Laptop Policy
Please bring a laptop to class that has Excel, PowerPoint and Internet access to each class. We will often be looking at websites in class. Also, we will be walking through the Google Analytics, Excel and PowerPoint functions for the homework assignments.
VIII. Course Schedule

Week 1 – January 12

What is success for an organization? How do you know?
Why measure?
What metrics matter?

The "verbs" of online actions: What types of audience behavior can be measured on a website?

Homework due January 26 (in two weeks)

• Assignment 1 – Initial assessment of a variety of news and nonprofit organization websites.
  - Who are the target audiences?
  - What opportunities and problems does the org have?
  - What types of audience behavior does the org have built into its site architecture?

• Readings and videos - There's a lot of reading this week as there's no class next week due to the holiday. The materials below will be used in lectures, assignments and the basic metrics test through Week 5.

What is web analytics?
  - "Web analytics - present and future" from Web Analytics: An Hour a Day
  - "The bold new world of web analytics 2.0" from Web Analytics 2.0

How is traffic data gathered?
  - Video: Google Analytics Platform Principles - Lesson 1.3 - The data model
  - Video: Google Analytics Platform Principles - Lesson 2.2 - Website data collection

Basic metrics
  - "Revisiting foundational metrics" from Web Analytics: An Hour a Day
  - "The awesome world of clickstream analysis: metrics" from Web Analytics 2.0
  - Video: Google Analytics Academy - Lesson 3.2 - Key metrics and dimensions defined
  - Video: Google Analytics Academy - Lesson 2.2 - Core analytics techniques
  - "Web Metrics for Journalists" by the USC Media Impact
Project
  o "Engaged Minutes and Google Analytics," by Jonathan Weber of LunaMetrics for the USC Media Impact Project

Week 2 – January 19
MARTIN LUTHER KING, JR. DAY – NO CLASS

Week 3 – January 26
Review Assignment 1.

Basic metrics part 1
  • How digital audience behavior data is gathered
  • Strong vs. weak metrics
  • Conceptual and technical definitions of visits/sessions, page views, unique visitors/users, time on site vs. attention minutes

Homework due February 2
  • Assignment 2 – Basic metrics part 1

Week 4 – February 2
Review Assignment 2.

Basic metrics part 2
  • Analytical reporting periods
  • Trends vs. totals or aggregations
  • Basic segments available in Google Analytics: sessions/visits from new vs. returning users, sessions by geographic area
  • Bounce rates; landing pages; pages per visit

Homework due February 9
  • Assignment 3 - Basic metrics part 2

Week 5 – February 9
Review Assignment 3.

Basic metrics test (15% of course grade) on Blackboard - bring laptop

Homework due February 23 (two weeks)
• Assignment 4 – Basic math and Excel skill-level assessment and customized toolbar set-up. PowerPoint basics and customized toolbar set-up.

• Readings and videos
  o "A Newsroom Math Guide," from Numbers in the Newsroom
  o Excerpt from The Wall Street Journal Guide to Information Graphics
  o Video: Google Analytics Academy - Lesson 5.1 - Reporting overview

**Week 6 – February 16**  
**PRESIDENT’S DAY – NO CLASS**

**Week 7 – February 23**  
Review basic metrics test.

Getting basic metrics data out of Google Analytics

Review of basic analytical calculations and Excel formulas: percentages; average vs. median; amount vs. percent of change; percentage point differences; maximum vs. minimum values. Rounding. Adding trend lines with PowerPoint. Line chart colors; axis and data labeling.

**Homework due March 2**
• Assignment 5 - Basic metrics analysis with line charts

• Readings and videos
  o "Beginner's guide to web data analysis: ten steps to love & success (Step #2: How good is the acquisition strategy?)," by Avinash Kaushik
  o "Excellent analytics tip #18: make love to your direct traffic," by Avinash Kaushik
  o Video: Google Analytics Academy - Lesson 5.3 - Acquisition metrics
  o "Email newsletter metrics for journalists," by the USC Media Impact Project

**Week 8 – March 2**
Review Assignment 5.
Traffic sources (or visitor acquisition) metrics part 1: How did users find the site? How should an org market its site to its target audience segments?

- Direct
- Search - external
- Social media
- Referring sites

E-mail newsletter metrics in Mail Chimp

Bar chart formats, colors and labeling

**Homework due March 23 (in two weeks)**
- Assignment 6 – Traffic sources analysis with bar charts

- Readings and videos
  - Brand vs. generic search traffic reading TBD
  - Video: Keyword Not Provided in Google Analytics - Part 1: Queries Report, by KISSmetrics
  - Video: Keyword Not Provided in Google Analytics - Part 2: Landing Page Report & Geo Summary Report, by KISSmetrics

**Week 9 – March 9**
Review Assignment 6.

Traffic sources metrics part 2: Basic external search keyword analysis with Google Webmaster Tools - increasing click-through rates, improving landing pages

- Cleaning and organizing keyword traffic data
- Analyzing keyword traffic using Excel pivot tables

**Homework due March 23 (in two weeks)**
- Assignment 7 - External search keyword analysis with tables and charts

- Readings and videos
  - "Tags don't cut it" and "Topics, themes, subjects," by Stijn DeBrouwere
  - TagEd, an example of an education taxonomy developed for a news organization, by the Harmony Institute for the USC Media Impact Project
Week 10 - March 16 – SPRING BREAK

Week 11 – March 23
Review Assignment 7.

Visitor behavior metrics part 1: Story/content analysis

Page views vs. unique page views by story
Differentiating between home pages, section fronts and story pages
Story taxonomies

Homework due March 30
- Assignment 8 - Visitor behavior metrics part 1

- Readings and videos
  - "Segmenting Google Analytics by session frequency," by Jonathan Weber, LunaMetrics
  - "How count of sessions is calculated," from the Google Analytics help desk
  - "Reading reports in Google Analytics: recency," by Robbin Steif, LunaMetrics
  - Google Analytics Academy videos TBD

Week 12 – March 30
Review Assignment 8.

Visitor behavior metrics part 2: Frequency and recency

Homework due April 6
- Assignment 9 – Frequency and recency

- Readings and videos
  - Video: Google Analytics Academy - Lesson 4.4 - Setting up goals and ecommerce
  - "The Google Analytics conversion funnel survival guide," by KISSmetrics
  - "What funnel shapes can tell you," from Advanced Web Metrics with Google Analytics by Brian Clifton

Week 13 – April 6
Review Assignment 9.

Outcome metrics; funnels
Micro vs. macro conversions; Google Analytics "goals"
In-class assignment that will be part of your final project
There can only be one Annenberg Analytics PadiTrack
(funnel software) user and one set of custom segments, so
we'll get the data together in class.

**Homework due April 13**
• Finish the in-class assignment on outcome metrics and Google
  Analytics custom segments that will be part of your final project.

• Readings and videos
  o Facebook Insights readings TBD

**Week 14 – April 13**
Review outcome metrics assignment.

Discussion of final project

Facebook Page metrics and Facebook Insights overview
There can only be one user at a time in the Annenberg
Analytics Facebook account, so we'll get the data together
in class.

**Homework due April 20**
• Review the Facebook Page of the organization you'll be
  analyzing for the final project. You will start the Facebook
  analysis in class on April 27.

**Week 15 – April 20**
Discussion of the role of Facebook for news and nonprofit
organizations.

Final project workshop; one-on-one meetings

**Week 16 – April 27**
Final project workshop; one-on-one meetings

**FINAL - Due on Monday, May 11, 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 herein of an amount equal to 1 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 in to the instructor by the last day of class. Note: The internship must be 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/1100-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://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety 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://dornsife.usc.edu/ali], 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.

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.

X. About Your Instructor
My research and consulting activities focus on media analytics strategy, web analytics, media audiences, and news business models. I am the director of the USC Annenberg Norman Lear Center Media Impact Project, which is funded by the Bill & Melinda Gates Foundation, the John S. and James L. Knight Foundation and the Open Society Foundations.

I am also the project lead on Open Data LA [http://www.OpenDataLA.org] at the USC Annenberg Center on Communication Leadership and Policy. This joint project with the USC Sol Price School of Public Policy aims to increase transparency in government by assessing the level and quality of open data initiatives in the 88 incorporated cities in Los Angeles County.

My previous work at USC Annenberg includes teaching data journalism, directing multidisciplinary programs with Viterbi, Marshall and other schools, and running the Convergence Core Curriculum.

My past work experience includes management positions in online planning and operations, strategic planning, marketing and finance at Gannett, the Los Angeles Times and Media Insight Group. I have an undergraduate degree in journalism and an MBA from USC.