Introduction to Digital Communication Analytics

JOUR 5000 • Spring 2018

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100% Online

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Teaching Assistant: Scott Hamilton, M.A., Scott.Hamilton@unt.edu, on campus by appointment or virtually via Google Hangouts as scj.hamilton@gmail.com

Description:
This course explores the fundamental concepts and principles that underlie techniques for extracting useful information and knowledge from digital communication data. The primary goal of the course is to help you come to view problems from a data perspective and understand how to systematically and critically analyze such problems. Data-analytic thinking can be applied in a variety of ways, from social media marketing and analysis to customer relationship management, strategic communication through the field of public relations and advertising, to data-driven decision-making and much more. Throughout this course it is critical that students come to an understanding of the nature of data and its significance for society. With this in mind, the course will focus on introducing technical data skills (acquire, manage, analyze, & use) within both a social and societal context.

Course Objectives:
1. Demonstrate an understanding of the history and role of professionals and institutions shaping the digital analytics and communications industries.
2. Think critically, creatively, and independently to apply DCA models, tools, and techniques to solve problems and answer questions.
3. Compare and contrast the various analytics tools and techniques required of the digital communication analyst.
4. Apply tools and technologies appropriate for the practice of DCA.
5. Organize data, tools, and resources to plan and execute a DCA project and to report in writing analytical findings.

Philosophy: This course will be applied and interactive. Assigned work has been developed to integrate and facilitate students’ simultaneous learning of analytical concepts and techniques, as well as the application of the requisite tools critical to digital communication analysts. As students you are encouraged to apply your real-world professional experience to the learning process throughout the course. Further, any previous coursework in business-related fields such as sales and marketing or advertising, and in human behavior, such as sociology, psychology, and social psychology will be immensely useful as you build your skills in analytical thinking and practice these new techniques.

Prerequisites: Graduate standing

Course Structure. This online course consists of pre-recorded lectures, readings, discussions, writing assignments, and weekly check-ins with the instructor. The lectures will introduce the principles, tools, and professional applications of digital communication analytics. Periodically, pre-recorded lectures from developers of various analytics tools may supplement the instructor’s lectures. Other course activities are
opportunities to apply those principles and tools. Students will learn how to collect and translate digital content into data that can be used to enhance decision-making by marketers, advertisers, and public relations and social media professionals, as well as many others. Students are required to keep up with readings and recorded lectures, to turn in all assigned work on time, and actively engage in any Blackboard forum discussions.

**Honor code.** Student Standards of Academic Integrity specifically addresses acts of academic dishonesty including cheating and plagiarism. I prefer to consider this an Honor Code. When you submit work for this class, that is the same as making a statement that you have produced the work yourself, in its entirety. Plagiarism, copyright infringement, and similar uses of other people’s work are unacceptable. This is also true of fabrication. Anything taken from the internet (or any other source) should not just be paraphrased, but should be rewritten in your own words incorporating your own ideas.

You’ll receive a “zero” for any work that is the result of plagiarism or cheating and will not be allowed to revise the work. The situation may also be reported to the Office of Academic Integrity, and you may be required to reapply to be a major in the Mayborn School of Journalism. Depending on the weight of the assignment, you could fail the course. Your enrollment in this class presupposes your commitment to this Honor Code. If you have any questions about your responsibility or my responsibility as a faculty member under this Honor Code, please bring them to me or discuss them with someone in the Office of Academic Integrity.

**Announcements.** Please watch Blackboard as well as your emails for any all announcements concerning important information and changes regarding the course. It is your responsibility to check for these announcements and any course changes, including any due date changes.

**Special accommodation.** If a student requires special accommodation, he/she should contact the instructor of this class and the Office of Disability Accommodation. Please do so at the beginning of the semester.

**Diversity.** The Accrediting Council for Educators in Journalism and Mass Communication (ACEJMC) accreditation standards require that diversity be incorporated into the curriculum. The University of North Texas Department of Journalism is an accredited program.

**Attendance.** This course is 100% online with specific due dates that must be met regardless of whether or not the university campus is open or closed. This is not an independent study course. A fundamental aspect of online instruction is the expectation and requirement that students coordinate their coursework requirements with their personal and professional schedules and obligations. Failure to meet course obligations will result loss of points and potentially dissatisfaction course status. Students are expected to submit all coursework by the due date. **Unless otherwise stated by the instructor, all assignments are to be uploaded in Blackboard by 11:59 pm on the due date.**

All assignments and written work must be submitted in a .doc, .docx, or the open source Libre Office’s .odf file type. **No other file types will be accepted unless otherwise stated by the instructor.** A first violation of this policy will result in a 50% deduction of the total value of the assignment before grading begins. Any further violations will result in a grade of “0” and the assignment will not be graded. All written work should be typed in 12-point New Times Roman font and double-spaced unless otherwise indicated by the instructor.

**Required texts:**


Deadlines. Because a key characteristic of the position of digital analyst requires the ability to quickly plan, execute, and report simple and complex analyses in a very short period of time, students are expected to meet all deadlines without exception.

Reading assignments. Readings should be completed as soon as possible during each new module so that you are prepared for forums and assignments. Readings from texts, articles and/or review of certain websites will be assigned to support achievement of the course objectives. Weekly readings may include last minute articles and tweets as they relate to the class.

Writing requirements. The course’s written assignments must be completed using either the American Sociological Association (ASA) or American Psychological Association (APA) style guides and must follow data analytics reporting conventions.

How your course grade will be determined.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Blackboard Student Forums</td>
<td>6 @ 25 points each for a total of 150 points</td>
</tr>
<tr>
<td>Blackboard Student Bio post</td>
<td>1 @ 25 points each for a total of 25 points</td>
</tr>
<tr>
<td>Check-ins with Instructor</td>
<td>8 @ 25 points each for a total of 200 points</td>
</tr>
<tr>
<td>E-lab Book/Professional portfolio</td>
<td>1 @ 75 points each for a total of 75 points</td>
</tr>
<tr>
<td>Reaction paper Assignments</td>
<td>3 @ 50 points each for a total of 150 points</td>
</tr>
<tr>
<td>Analytics tutorial exercises</td>
<td>3 @ 50 points each for a total of 150 points</td>
</tr>
<tr>
<td>Final Analytics Project</td>
<td>1 @ 250 points each for a total of 250 points</td>
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Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>%</th>
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<tbody>
<tr>
<td>A</td>
<td>90 - 100</td>
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<tr>
<td>B</td>
<td>80 - 89.9</td>
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<tr>
<td>C</td>
<td>70 - 79.9</td>
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<tr>
<td>D</td>
<td>60 - 69.9</td>
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<tr>
<td>F</td>
<td>&lt; 60</td>
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Academic Fraud and Dishonesty. Honesty, integrity, and professionalism are essential to success in business and academic environments. Because of the potential for grievous consequences connected with dishonesty, fraud, or misrepresented work products in the field of analytics, serious repercussions are mandated for students who choose to cheat, deceive, misrepresent or misappropriate materials, ideas, or content for their own work. Therefore, to minimize the opportunity for such behavior while providing students with the chance to recognize borderline or questionable choices, Turnitin, the Internet-based plagiarism prevention service will be used in this course to verify and validate all work. Students will have an opportunity to correct suspect any content identified by Turnitin in their written work. Students should therefore not wait until 15 minutes or less before submitting any assignment as it will have to be processed and screened by the service before it is posted in Blackboard. Students are responsible for the content of their work once it is posted in Blackboard. Students suspected of committing academic fraud on the first offense will be subjected to the full discipline of the Mayborn School of Journalism, The Toulouse Graduate School and the University of North Texas. The University of North Texas’ policy on academic fraud is available at https://policy.unt.edu/sites/default/files/06.003_StudentStandardsOfAcademicIntegrity_8_2017.pdf. It is
condition of enrollment and participation in this course that all students will read this policy, understand and accept the policy.

**Netiquette**
All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Here are some important netiquette guidelines from UNT CLEAR:

- Remember you are communicating with a human being.
- Behave online in the same way that you would in-person.
- Communication in the online classroom is different from other places in cyberspace.
- Respect other's time and bandwidth: be concise.
- Make yourself look good by using proper grammar and punctuation.
- Share your knowledge.
- Keep flame wars from escalating.
- Respect the privacy of your classmates.
- If you have advanced IT skills, don't abuse your power.
- Be kind when addressing others' mistakes.
- Follow the Golden Rule

For more information, see [https://www.untdallas.edu/sites/default/files/page_level2/ajc0262/pdf/brochure_netiquette.pdf](https://www.untdallas.edu/sites/default/files/page_level2/ajc0262/pdf/brochure_netiquette.pdf)

**Coursework**

**Blackboard Weekly Activities**

**Blackboard Student Bio post (1 for a total of 25 points)**

The first week of the course each student should navigate to the “Student Introductory Bio” in Module one to introduce themselves and also to interact with their instructor and classmates. This is the opportunity for students to begin to develop a professional network and to find study group or study team partners for the program. Students are encouraged to make use of this opportunity.

**Blackboard Student Forums (6 for a total of 150 points)**

Each week to promote students’ critical thinking and decision-making skills concerning the application of analytic techniques to strategic communication there will be an examination of an analytics question or problem. In some instances, a visualization will be posted and students will be asked to analyze it or proffer an alternative? Other times, students may be asked to develop a strategy or solution to a question or problem. Whatever the topic, the forum gives students the opportunity to exercise skills in brief problem-solving scenarios.

There are two requirements for this forum. First, each student must post a minimum of 100 words and a maximum of 200 words in response to the instructor’s posted material. This is called the “Applied post” and should be so labeled by each student every week. The Applied post should respond critically to the points or questions posed by the instructor. Use APA or ASA style references and in-text citations to support your ideas. The second part of each weekly post means that each student must respond to at least one fellow student’s Applied post. This response post, should be labeled, “Critique post” and should be a minimum of 100 words and a maximum of 200 words in which the student evaluates (using his or her professional experience, and if so desired, references using APA or ASA style references and in-text citations of scholarly, professional, or trade
publications as support) the other student’s Applied post. Bear in mind that references are not part of the word count. Examples of critiquing include explaining how they would improve on the fellow student’s applied post recommendations and why or noting what alternatives might be tried/implemented and why. Statements such as "I agree with X" or "I found the X very interesting" are meaningless and are unacceptable for any assignments in this course. You must provide specific evidence that shows why you feel or think as you do. Creativity will be rewarded as will critical thinking and original solutions. All applied and critique posts must be completed no later than Wednesday each week by 11:59pm. If students do not complete the forum requirements, they will not receive full credit for the written assignment tied to the forum.

Student Portfolio and E-lab book (1 for a total of 75 points)

To support students’ active learning of programming, coding, and analytical techniques as well as to facilitate their future career ambitions, all students will be expected to create a web-based professional portfolio using UNT’s Career Connect platform. Code, coding comments, why steps were taken and the results of those steps, as well as any diagrams or other content that students use in their programming and analyses should be saved as an E-lab book in the form of a Word or Libre Office document, which in turn should be uploaded to the student’s portfolio. Other materials such as links to useful reference websites and tutorials, important readings, etc. should be included as well so that the entire portfolio site is an easily accessible personal reference library for each individual student to have forever.

At weeks four and eight of the course, students are required to share their portfolio with the instructor for grading and feedback purposes. Successfully completing the E-lab book and building the portfolio is a condition of passing the course and other instructors will continue to support and expect students’ portfolio development. Examples of E-lab books will be available on Blackboard for students to review and the link to the UNT portfolio site complete with a video tutorial and instructions is in the main menu for this course. Students should create their basic portfolio framework and settings by the end of Module one so that they are prepared to begin adding any useful content they acquire during the course.

Weekly Check-ins (8 for 200 points total)

Because research studies conducted on online education consistently reveal that distance education students typically feel isolated and alone, this course makes use of weekly GoTo Meeting video chats between each student and the instructor. Also, budding analysts benefit greatly from personal mentoring, and these personal weekly meetings enable student empowerment. Each week students are expected to contact the instructor via the permanent link https://www.gotomeet.me/ValarieBell during their regular weekly meeting scheduled via email with the instructor. Throughout all my years of teaching statistics and analytics, without exception, the individual weekly check-in has overwhelmingly been the course feature my students loved and valued most of all. It is their time to use as they wish and the time can range from 5-10 minutes to 4 or 5 hours – all depending on what the individual student wants and needs.

During each check-in the student will apprise the instructor of the following: 1) their progress in the course thus far; 2) any worries or concerns about the coursework and requirements for it; 3) the need for individual tutoring; 4) personal emergencies or issues that may hinder the student’s ability to successfully complete all coursework on time assigned; 5) additional resources or assistance the student may require; and, 6) any other issues as needed. Students will be awarded points for meeting this requirement. Students who fail to fulfill all eight check-ins will lose points. Also, students who complete all check-ins may be granted consideration if they are reasonably close to the next higher letter grade. Students should email the instructor by January 17, 2018 at 5pm to arrange their weekly check-in time. Of course this time
can always be changed to accommodate both the instructor’s and student’s changing schedule and obligations.

Analytics Tutorial Exercises (3 for a total of 150 points)

After Module one, students will begin analytics tutorial exercises that will give students the opportunity to practice new techniques and learn new tools. Each student should be careful to save the resources they use for these exercises as well as the codes, syntax, videos, handouts, and other material in their personal e-lab book and portfolio for future reference. The instructor will work with each student individually to help them successfully navigate and complete these tutorials.

Reaction Papers (3 for a total of 150 points)

During the course, students will be challenged to apply the readings and other course material to addressing real-world issues and projects. To this end, students will write three reaction papers intended to promote their application of methods, tools, models, and concepts to industry. Each paper will ask students to relate the readings to a specific question or series of questions or to a scenario. All papers will be submitted in Blackboard in 12-point New Times Roman font in a Word or Libre Office document by 11:59pm on the noted due date. All students must choose either ASA or APA style in their creation of their papers. Purdue University’s site Purdue OWL has current guidelines for writing and citing sources in both APA and ASA, simply navigate to this site and search for APA or ASA https://search.yahoo.com/search?fr=spigot-chr-gcmac&ei=utf-8&ilc=12&type=671737&p=Purdue+owl.

Final Analytics Project & Presentation (250 points)

During the course, each student will develop their analytical and critical thinking skills as well as their ability to present analytical findings to non-analyst stakeholders by reviewing and analyzing either a case study or a dataset. Students will then present their findings through a written report as well as a live or pre-recorded 10-15-minute presentation of their findings. The student may choose whether to pre-record their presentation or to gain the experience of a live presentation before stakeholders. Since this assignment is intended to hone your professional analytical skills, you must prepare and present your analysis as if you are presenting results to a client. It is therefore essential that your presentation makes use of simple and easy to interpret/read data visualizations and that the overall language used in the presentation is easy to understand by non-analysts.

Project considerations when analyzing the data:

1) What immediately ‘grabs’ you in the data? What secondary impressions do you get beyond any immediately apparent observations? What patterns or anomalies have you observed? Ultimately, what are the takeaways you can find in these data?

2) Which metrics would you identify as being most critical to examine in this case or for these data?

3) Identify both the best and worst performers. Describe how you could apply your findings to a future campaign.

Presentation Guidelines:

1) All presentations, whether live or pre-recorded, should be no less than 10 minutes and no more than 15 minutes.
2) All presentations should be prepared using Power Point or open source software Libre Office Suite’s presentation program called Impress, which can be found at https://www.libreoffice.org/discover/impress/. Presentations should consist of 6-8 slides including 1 cover slide and 1 reference slide. The other 4-6 slides should include the following content: summary of the problem with the case or dataset, outline of your conclusions, and an explanation of how you arrived at those conclusions, and at least 1 data visualization.

Students presenting live instead of via recording should be careful to schedule their presentation time, no later than February 25th by 5pm, to occur sometime during the final week of the course, between March 1 and March 5.