Research Fundamentals Digital Communication  Analytics  
aka  
Quantitative Analytics  

JOUR 5251 • Spring 2019 • 100% Online

Professor  
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Mondays 6-8pm & Saturdays 9am-Noon at my zoom virtual office at https://unt.zoom.us/my/dr.valbell or by appointment.

Teaching Assistant:  Shanae Jefferies, M.A., Shanae.Jeffereies@unt.edu, on campus by appointment or via weblink by arrangement
Research Fundamentals Digital Communication  Analytics
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Quantitative Analytics

Description

This course explores the fundamental concepts and principles that underlie quantitative analytics and statistical most frequently used by digital communication analysts. The primary goal of the course is to help you develop competence and confidence in selecting and applying quantitative methods and then in interpreting and reporting quantitative findings in language that is easily understood so that stakeholders can readily apply those findings. Further, students will continue the work they began in JOUR 5000 by building on their critical thinking skills and their understanding of the structures and characteristics of different types of data. Throughout this course it is critical that students come to an understanding of the variety of forms that data can assume, the many increasing ways in which data can be modeled and conceptualized, and the virtually limitless sources of data available to the digital communication analyst.

Course Learning Outcomes

1. Select, plan, and specify the appropriate quantitative statistical and/or analytical models to test hypotheses or investigate research questions.
2. Analyze and report the findings of quantitative statistical and/or analytical models using language and visuals accessible and understandable by non-experts and stakeholder.
3. Design, execute, and analyze web-based surveys to test hypotheses or investigate research questions.
4. Select, plan, and execute the appropriate survey sampling design and strategy for social surveys.
5. Choose and apply the necessary analytics tools and techniques required to tackle industry and/or organization questions.
Course 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 quantitative 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; preferably JOUR 5000

Course Structure
This online course consists of readings, discussions, writing assignments, analytics’ assignments, tutorials, and regular check-ins with the professor. 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 course materials. 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 Canvas forum discussions.
Research Fundamentals Digital Communication Analytics
aka
Quantitative Analytics

Required texts

b) *Discovering Statistics Using SPSS*. 3rd edition (2009) by Andy Field. (ISBN-13: 978-1847879073; ISBN-10: 1847879071). **I cannot recommend this book** (in any edition—3rd or later) **highly enough.** Field’s text teaches you basic through intermediate statistics at the same time it teaches you how to use the statistical software SPSS. You will not find a better text. I would not have gotten through graduate school without this excellent text. I recommend you get the Kindle/e-book version as this text is thick and VERY heavy. If you get in electronic form then you can access it anywhere, rather than having to tote around a book that weighs close to 5 pounds. As an e-book it’s searchable so you can get the answers you need quickly.

Recommended Statistical Websites for Reference, Assistance, & Practice  Tutorials

a) Andy Field’s comprehensive website that uses video lectures, tutorials, practice exercises with datasets to take you from basic through intermediate statistics: [https://www.discoveringstatistics.com/](https://www.discoveringstatistics.com/)
b) UCLA’s Institute for Digital Research and Education site with SPSS tutorial modules for common topics but also for more useful miscellaneous topics: [https://stats.idre.ucla.edu/spss/modules/](https://stats.idre.ucla.edu/spss/modules/)
e) Social Science Computing Cooperative, Basic navigation of SPSS complete with step-by-step how-tos with SPSS screen shots so you can follow along [https://ssc.wisc.edu/sscc/pubs/spss/classintro/spss_students1.html#StartingPASWStatistics](https://ssc.wisc.edu/sscc/pubs/spss/classintro/spss_students1.html#StartingPASWStatistics)

Sources of Data for Practice and Research

a) General Social Survey [https://gssdataexplorer.norc.org/](https://gssdataexplorer.norc.org/)
b) Roper Center social surveys and polls [https://ropercenter.cornell.edu/CFIDE/cf/action/catalog/catalogResult.cfm?k](https://ropercenter.cornell.edu/CFIDE/cf/action/catalog/catalogResult.cfm?k)
Data.gov Federal site for hundreds of datasets from all areas of government, including various departments such as Agriculture, Treasury, Health & Human Services, the Centers for Disease Control, Education, Climate/Weather, etc. https://www.data.gov/


There are tons of other data. If you don’t see something you like, contact Dr. Bell and she can provide a dataset that meets with your interests.

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.
Research Fundamentals Digital Communication  Analytics  aka  Quantitative Analytics

Grading scale
Grade  %
A  900 – 1000
B  800 - 899
C  700 - 799
D  600 - 699
F  < 600

How your course grade will be determined

Discussion Forums  4 @ 25 points each for a total of 100 points
Check-ins  4 @ 20 points each for a total of 80 points
Reaction Papers  3 @ 100 points each for a total of 300 points
Analytics Assignments  3 @ 100 points each for a total of 300 points
Advertising Assignment  1 @ 70 points each
Final Analytics Project  1 @ 150 points each

COURSEWORK

Canvas Introductory Student Biography post (1 @ 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 professor 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.
Research Fundamentals Digital Communication  Analytics
aka
Quantitative Analytics

Canvas Student Discussion Forums (3 @ 25 points each)

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 professor’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 professor. 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 by the deadlines posted in the Module To-do List. If students do not complete the forum requirements, they will not receive full credit for the written assignment tied to the forum.

Student-Professor Check-ins (4 @ 20 points each)

Because research studies conducted on online education consistently indicate that distance education students typically feel isolated and alone, this course makes use of zoom video chats between each student and the professor. Also, budding analysts benefit greatly from personal mentoring, and the resulting student empowerment. At least four times during the course, each student is expected to navigate to the professor’s permanent virtual office link at https://unt.zoom.us/my/dr.valbell during weekly office hours. Throughout all my years of teaching statistics and analytics, without exception, the individual check-in has
Research Fundamentals Digital Communication  Analytics  aka  Quantitative Analytics

overwhelmingly been the course feature my students loved and valued most of all. It is their
time to use as they wish—all depending on what the individual student wants and needs.
Additional time can always be scheduled for a student as needed.

During each check-in the student will apprise the professor 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 four 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. At least 2 of the check-ins need to be done during the last four weeks of the course,
particularly during the planning of the final course project.

Analytics Assignments (3 @ 100 points each)

After Module two, students will begin analytics tutorial exercises that will give them 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 @ 100 points each)

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 Canvas in 12-
point New Times Roman font in a Word or Libre Office document by 11:59pm on the due
dates indicated in Canvas. 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
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.

In the course’s final Module, Dr. Bell provides a complete packet of information, resources, a final paper template as well as several differing datasets in Canvas from which students can select a dataset to analyze for the project. Nonetheless, Dr. Bell strongly urges students to gain their employer’s permission to collect and analyze their organization’s data in order to address 3-5 research questions or hypotheses. This demonstrates to the employer that their employee’s continuing studies provide a real value, even at an early stage.

**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
Research Fundamentals Digital Communication  Analytics  
aka  
Quantitative Analytics

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 the second-to-last Monday of the course by 5pm, to occur sometime during the final week of the course.

**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. Students are responsible for the content of their work once it is posted in Canvas.

Academic dishonesty includes, but is not limited to, the use of any unauthorized assistance in taking quizzes, tests, or exams; dependence upon the aid of sources beyond those authorized by the professor, the acquisition of tests or other material belonging to a faculty member, dual submission of a paper or project, resubmission of a paper or project to a different class without express permission from the professors, or any other act designed to give a student an unfair advantage. Plagiarism includes the paraphrase or direct quotation of published or unpublished works without full and clear acknowledgment of the author/source. Academic dishonesty will bring about disciplinary action which may include expulsion from the university. This is explained in the UNT Student Handbook but it is also posted online in the course under “Academic Dishonesty Policy.”

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. It is a condition of enrollment and participation in this course that all students will read the University’s dishonesty policy, understand and accept it.

**MSOJ ACADEMIC INTEGRITY POLICY**

The codes of ethics from the Society of Professional Journalists, American Advertising Federation and Public Relations Society of America, as well as the Digital Analytics Association address truth and honesty. The Mayborn School of Journalism embraces these tenets and believes that academic dishonesty of any kind – including plagiarism and fabrication – is incongruent with all areas of journalism. The school’s policy aligns with UNT
Policy 18.1.16 and requires reporting any act of academic dishonesty to the Office for Academic Integrity for investigation. If the student has a previous confirmed offense (whether the first offense was in the journalism school or another university department) and the student is found to have committed another offense, the department will request the additional sanction of removing the student from the Mayborn School of Journalism. The student may appeal to the Office for Academic Integrity, which ensures due process and allows the student to remain in class pending the appeal.

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
Research Fundamentals Digital Communication  Analytics
aka
Quantitative Analytics

For more information, see

**Acceptable Student Behavior:**

Student behavior that interferes with an professor’s ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the professor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.deanofstudents.unt.edu. Further, the UNT Netiquette Guidelines are posted in the course in Canvas in the “Discussions” link.

**ACCESS TO INFORMATION**

As you know, your access point for business and academic services at UNT occurs within the my.unt.edu site www.my.unt.edu. If you do not regularly check Eagle Connect or link it to your favorite e-mail account, please do so, as this is where you learn about job and internship opportunities, MSOJ events, scholarships, and other important information. The website that explains Eagle Connect and how to forward your email: http://eagleconnect.unt.edu/

**Important Notice for F-1 Students taking Distance Education Courses**

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the professor) can include activities such as taking an on-campus exam, participating in multiple on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student’s responsibility to do the following:

(1) Submit a written request to the professor for an on-campus experiential component within one week of the start of the course.

(2) Ensure that the activity on campus takes place and the professor documents it in writing with a notice sent to the International Advising Office. The UNT International Advising Office has a form available that you may use for this purpose.

**Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this**
Research Fundamentals Digital Communication  Analytics  aka  Quantitative Analytics

course, students should contact the UNT International Advising Office (telephone 940-565-2195 or email international@unt.edu) to get clarification before the one-week deadline.

EMERGENCY NOTIFICATION & PROCEDURES
UNT uses a system called Eagle Alert to quickly notify you with critical information in an event of emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). The system sends voice messages (and text messages upon permission) to the phones of all active faculty staff, and students. Please make certain to update your phone numbers at www.my.unt.edu. Some helpful emergency preparedness actions include: 1) ensuring you know the evacuation routes and severe weather shelter areas, determining how you will contact family and friends if phones are temporarily unavailable, and identifying where you will go if you need to evacuate the Denton area suddenly. In the event of a university closure, your professor will communicate with you through Canvas regarding assignments, exams, field trips, and other items that may be impacted by the closure.

STUDENT PERCEPTIONS OF TEACHING (SPOT)
Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The short SPOT survey will be made available to provide you with an opportunity to evaluate how this course is taught. For the fall 2016 semester you will receive an email from "UNT SPOT Course Evaluations via IA System Notification" (no-reply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete your survey. Once you complete the survey you will receive a confirmation email that the survey has been submitted. For additional information, please visit the spot website at www.spot.unt.edu or email spot@unt.edu. Spots survey dates will be announced via email.

SEXUAL DISCRIMINATION, HARRASSMENT, & ASSAULT
UNT is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these acts of aggression, please know that you are not alone. The federal Title IX law makes it clear that violence and harassment based on sex and gender are Civil Rights offenses. UNT has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.
UNT’s Dean of Students’ website offers a range of on-campus and off-campus resources to help support survivors, depending on their unique needs: http://deanofstudents.unt.edu/resources_0. Renee LeClaire McNamara is UNT’s Student Advocate and she can be reached through e-mail at SurvivorAdvocate@unt.edu or by calling the Dean of Students’ office at 940-565-2648. You are not alone. We are here to help.

JOURNALISM REQUIREMENTS & GUIDELINES

RE-TAKING FAILED JOURNALISM CLASSES
Students will not be allowed to automatically take a failed journalism course more than two times. Once you have failed a journalism course twice, you will not be allowed to enroll in that course for one calendar year after the date you received the second failing grade. Once a student has waited one calendar year after failing a course twice, the student may submit a written appeal to the director to be approved to enroll a third time. Students will not be allowed to re-take a failed journalism course more than three times.

TEXTBOOK POLICY
The Mayborn School of Journalism doesn’t require students to purchase textbooks from the University Bookstore. Many are available through other bookstores or online.

ACADEMIC ADVISING
Students should meet with their Academic Advisor at least one time per long semester (Fall & Spring). It is important to update your degree plan on a regular basis to ensure that you are on track for a timely graduation.

- It is imperative that students have paid for all enrolled classes. Please check your online schedule daily through late registration to ensure you have not been dropped for non-payment of any amount. Students unknowingly have been dropped from classes for various reasons such as financial aid, schedule change fees, parking fees, etc. MSOJ will not be able to reinstate students for any reason after late registration, regardless of situation. It is the student’s responsibility to ensure all payments have been made.
Research Fundamentals Digital Communication  Analytics  aka  
Quantitative Analytics

LINKS TO IMPORTANT SPRING 2019 DATES AND DEADLINES CAN BE FOUND AT

https://registrar.unt.edu/registration/spring-registration-guide

OFFICE OF DISABILITY ACCOMMODATIONS
The University of North Texas and the Mayborn School of Journalism make reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323.

COURSE SAFETY STATEMENTS
Students in the Mayborn School of Journalism are urged to use proper safety procedures and guidelines. While working in laboratory sessions, students are expected and required to identify and use property safety guidelines in all activities requiring lifting, climbing, walking on slippery surfaces, using equipment and tools, handling chemical solutions and hot and cold products. Students should be aware that the University of North Texas is not liable for injuries incurred while students are participating in class activities. All students are encouraged to secure adequate insurance coverage in the event of accidental injury. Students who do not have insurance coverage should consider obtaining Student Health Insurance for this insurance program. Brochures for this insurance are available in the UNT Health and Wellness Center on campus. Students who are injured during class
activities may seek medical attention at the UNT Health and Wellness Center at rates that are reduced compared to other medical facilities. If you have an insurance plan other than Student Health Insurance at UNT, please be sure that your plan covers treatment at this facility. If you choose not to go to the UNT Health and Wellness Center, you may be transported to an emergency room at a local hospital. You are responsible for expenses incurred there.

Discussions/Student Forums: 4 X 25 points each

1) Student Forum #1 Introductory posts due Wednesday, Jan. 16 by 11:59pm. All students must respond to at least 2 fellow student's posts by Saturday, Jan. 19 by 11:59pm.
2) Student Forum #2. Make your own post by Wednesday, Jan. 30 by 11:59pm. All students must respond to at least 2 fellow student's posts by Sunday, Feb. 3 by 11:59pm.
3) Student Forum #3. Make your own post by Wednesday, Feb. 6 by 11:59pm. All students must respond to at least 2 fellow student's
Research Fundamentals Digital Communication  Analytics
aka
Quantitative Analytics
posts by Sunday, Feb. 10 by 11:59pm.
4) Student Forum #4. Make your own post by Wednesday, Feb. 13. All students must respond to at least 2 fellow student's posts by Saturday, Feb. 16 by 11:59pm.

Check-ins: 4 X 20 points each

1) 2 Check-ins before February 17
2) 2 Check-ins for planning the final project: during Modules 4 & 5

Reaction Papers: 3 X 100 points each

1) Reaction Paper #1 due Jan. 27 by 11:59pm
2) Reaction Paper #2 due Feb. 9 by 11:59pm
3) Reaction Paper #3 due March 3 by 11:59pm

Analytics’ Assignments 3 X 100 points each:

1) Analytics Assignment #1 due Feb. 3 by 11:59pm
2) Analytics Assignment #2 due Feb. 10 by 11:59pm
3) Analytics Assignment #3 due March 4 by 11:59pm

Advertising Assignment 1 X 70 points due Feb. 17 by 11:59pm

Final Analytics Project 150 points:

Paper and presentation due by Friday March 8 by 11:59pm
Research Fundamentals Digital Communication  Analytics
aka
Quantitative Analytics
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