



PSYO 380E: Social Media Research Methods and Analysis

Mondays and Thursdays 13:00–16:00, EME 1121
2022 Summer Term 1

Instructor: Rebecca Godard

Contact: rebecca.godard@ubc.ca

Office hours: Tuesdays and Fridays 10:00–11:00 on Zoom, or by appointment

<https://ubc.zoom.us/j/61273706189?pwd=ck1wK3p5QStVaytWUd1BMWhyNS9idz09>

Meeting ID: 612 7370 6189

Passcode: 275654

Course Description: Use of social media data in psychology research, ethics, social media data collection, specialized analytic methods for social media data.

Overview: In this course, you will learn how data from popular social media platforms such as Twitter, Reddit, and Facebook can be used to address research questions in psychology. You will learn how to collect data from these platforms and analyze it using a variety of specialized methods. You will apply these skills to a substantive research question by designing and conducting a study that uses social media data.

Detailed Course Description and Objectives: After completing this course, you will understand the opportunities and challenges that surround the use of social media data in psychology research. You will learn how to collect and analyze social media data and will be able to apply these skills to a real-world research question. To accomplish this, we will focus on the following course objectives:

1. *Understanding the role of social media data in psychology research:* Unique opportunities and challenges involved in social media research, examples of social media data in published research, ethical challenges and best practices in working with social media data.
2. *Collecting social media data:* Working with APIs to collect social media data, manual social media data collection.
3. *Analyzing social media data:* Analyzing engagement metrics, linguistic features, and user networks.

Required Readings: You are not required to purchase a textbook for this course. Course readings will be posted on Canvas.



Course Requirements: You will be assessed through the following assignments:

Weekly assignments (35%): You will complete seven assignments throughout the term. Each assignment will be worth 5% of your final course grade. Assignments will draw on material taught the previous week and will require you to apply the skills you learned to new research questions or data sets.

Final paper (50%): For your final paper, you will generate a research question that can be answered using social media data. You will then collect and analyze the data and present your findings as a research paper. You will work on this project throughout the term and will have opportunities for feedback and revision before the final version is due (see schedule below). Your final paper will be 5-7 pages (APA style, not including references or title page). The paper will be due on June 30.

Lightning talk (15%): You will present your findings from your final paper in a 5-minute “lightning talk”. This talk format is common at academic conferences and will give you the opportunity to present your methods and findings in a concise, captivating manner.

Attendance: Because this is a hands-on, lab-based course, it is extremely important that you attend class. If you need to miss class for a legitimate reason, please do your best to notify me ahead of time so that we can make a plan for you to attend remotely (if possible) and to catch up on the material. Current information about campus COVID-19 procedures and policies can be found at <https://ok.ubc.ca/covid19/>.

Late policies: For all weekly assignments (each worth 5 points), there will be a 24-hour “grace period” in which you can submit assignments with no late penalty. However, because the activities build on each other, I recommend submitting assignments on time and only using the grace period when necessary. Assignments that are submitted after the grace period will be penalized by 1 point for each day late (i.e., 5 points if submitted on time or during the grace period, 4 points for one day after the grace period, 3 points for two days after the grace period, etc.). Out of fairness to all students, there will be no extensions given on the lightning talk or final paper.



Course Schedule

Readings listed under each class are to be completed before class. Assignments listed under each class are due before the beginning of class. Optional final paper submissions are completely optional. If you choose to submit a draft of the indicated section of your paper, I will return it to you with feedback by the following class.

May 16: Why study social media; Ethics in social media

May 19: Introduction to R

- *Assignment due:* Assignment 1, Examples of psychology research using social media data; software and account setup

May 23: No class (Victoria Day)

May 26: Data collection on Twitter

- *Readings:*
 - Eichstadt, J.E., Schwartz, H.A., Kern, M.L., Park, G., Labarthe, D.R., Merchant, R.A., Jha, S, Agrawal, M., Dziurzynski, L.A., Sap, M., Weeg, C., Larson, E.E., Ungar, L.H., & Seligman, M.E.P. (2015). Psychological language on Twitter predicts county-level heart disease mortality. *Psychological Science* 26(2), 159-160.
<https://doi.org/10.1177/0956797614557867>.
 - Murphy, S.C. (2017). A hands-on guide to conducting psychological research on Twitter. *Social Psychological and Personality Science* 8(4), 396-412.
<https://doi.org/10.1177/1948550617697178>.
- *Assignment due:* Assignment 2, R basics quiz

May 30: Data collection on Reddit

- *Readings:*
 - Yoo, M., Lee, S., & Ha, T. (2019). Semantic network analysis for understanding user experiences of bipolar and depressive disorders on Reddit. *Information Processing and Management* 56, 1565-1575.
<https://doi.org/10.1016/j.ipm.2018.10.001>.
 - Amaya, A., Bach, R., Keusch, F., & Kreuter, F. (2021). New data sources in social science research: Things to know before working with Reddit data. *Social Science Computer Review* 39(5), 943-960.
<https://doi.org/10.1177/0894439319893305>.



- *Assignment due:* Assignment 3, Collecting Twitter data

June 2: Engagement metric analyses

- *Readings:*
 - Griffith, F.J. & Stein, C.H. (2021). Behind the hashtag: Online disclosure of mental illness and community response on Tumblr. *American Journal of Community Psychology* 67, 419-432.
<https://doi.org/10.1002/ajcp.12483>.
 - Keib, K., Himelboim, I., & Yan, J.Y. (2018). Important tweets matter: Predicting retweets in the #BlackLivesMatter talk on Twitter. *Computers in Human Behavior* 85, 106-115.
<https://doi.org/10.1016/j.chb.2018.03.025>.
- *Assignment due:* Assignment 4, Collecting Reddit data
- *Optional final paper submission:* Research question

June 6: Linguistic analyses

- *Readings:*
 - Sylwester, K. & Purver, M. (2015). Twitter language use reflects psychological differences between Democrats and Republicans. *PLOS One* 10(9), e0137422.
<https://doi.org/10.1371/journal.pone.0137422>.
 - Liu, Y. & Yin, Z. (2020). Understanding weight loss via online discussions: Content analysis of Reddit posts using topic modeling and word clustering techniques. *Journal of Medical Internet Research* 22(6), e13745.
<https://doi.org/10.2196/13745>.
- *Assignment due:* Engagement metrics

June 9: User networks analyses

- *Readings:*
 - Borgatti, S.P., Mehra, A., Brass, D.J., & Labianca, G. (2009). Network analysis in the social sciences. *Science* 323, 892-895. <https://doi.org/10.1126/science.1165821>.
 - Milani, E., Weitkamp, E., & Webb, P. (2020). The visual vaccine debate on Twitter: A social network analysis. *Media and Communication* 8(2), 364-375.
<https://doi.org/10.17645/mac.v8i2.2847>.
- *Assignment due:* Linguistic analyses

June 13: Final paper/lightning talk workshop

- *Assignment due:* User network analyses
- *Optional final paper submission:* Method and results (submit at the end of class)



June 16: Manual data collection and qualitative analyses; continued final paper/lightning talk workshop

- *Readings:*
 - McKenna, B., Meyers, M.D., & Newman, M. (2017). Social media in qualitative research: Challenges and recommendations. *Information and Organization* 27, 87-89. <https://doi.org/10.1016/j.infoandorg.2017.03.001>.
 - Coady, A., Holtzman, S., Lainchbury, K., & Godard, R. (2022). What Twitter can tell us about user experiences of crisis text lines: A qualitative study. *Internet Interventions*.

June 20: Lightning talks

- *Assignment due:* Lightning talks (slides must be submitted by 11:59pm on June 19)

Finals period: Final paper due June 30 at 11:59pm. Since this is the last day of finals period, there will be no extensions.



University Policies and Resources

Grading Practices: Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record. <http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014> It is the policy in this course that final grades cannot be adjusted (through extra assignments or otherwise) in order to achieve a passing mark, higher letter grade etc. In order to maintain fairness within this course, requests for additional assignments or to round up grades will not be considered.

Academic Integrity: The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. **For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course.** Careful records are kept to monitor and prevent recidivism. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at:

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,54,111,0>

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students currently registered in this course. Under no circumstance are students permitted to provide any other person with means to access this material. Anyone violating these restrictions may be subject to legal action. Permission to electronically record any course materials must be granted by the instructor. Distribution of this material to a third party is forbidden.

UBC Okanagan Disability Resource Centre: The Disability Resource Centre ensures educational equity for students with disabilities and chronic medical conditions. If you are disabled, have an injury or illness and require academic accommodations to meet the course objectives, please contact Earllene Roberts, the Diversity Advisor for the Disability Resource Centre located in the University Centre building (UNC 214).

UNC 214 250.807.9263

Email: earllene.roberts@ubc.ca

Web: www.students.ok.ubc.ca/drc

UBC Okanagan Equity and Inclusion Office: UBC Okanagan is a place where every student, staff and faculty member should be able to study and work in an environment that is free from discrimination and harassment. UBC prohibits discrimination and harassment on the basis of the following grounds: age, ancestry, colour, family status, marital status, physical or mental disability, place of origin, political belief, race, religion, sex, sexual orientation or unrelated criminal conviction. If you require assistance related to an issue of equity, discrimination or harassment, or to get involved in human rights work on campus, please contact the Equity and Inclusion Office.

UNC 216 250.807.9291

Email: equity.ubco@ubc.ca Web: www.equity.ok.ubc.ca

Health & Wellness: At UBC Okanagan health services to students are provided by Health and Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Health and Wellness for more information or to book an appointment.

UNC 337 250.807.9270

email: healthwellness.okanagan@ubc.ca

Web: www.students.ok.ubc.ca/health-wellness

Student Learning Hub: The Student Learning Hub (LIB 237) is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines



and year levels to access a range of supports that include tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies. For more information, please visit the Hub's website (<https://students.ok.ubc.ca/student-learning-hub/>) or call 250-807-9185.

Office of the Ombudsperson for Students: The Office of the Ombudsperson for Students offers independent, impartial, and confidential support to students in navigating UBC policies, processes, and resources, as well as guidance in resolving concerns related to fairness.

Email: ombuds.office@ubc.ca

Web: www.ombudsoffice.ubc.ca

SAFEWALK: Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call 250.807.8076 For more information, see: www.security.ok.ubc.ca

Sexual Violence Prevention and Response Office (SVPRO): A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide.

Visit svpro.ok.ubc.ca or call us at 250.807.9640

Independent Investigations Office (IIO): If you or someone you know has experienced sexual assault or some other form of sexual misconduct by a UBC community member and you want the Independent Investigations Office (IIO) at UBC to investigate, please contact the IIO. Investigations are conducted in a trauma informed, confidential and respectful manner in accordance with the principles of procedural fairness.

You can report your experience directly to the IIO via email: director.of.investigations@ubc.ca or by calling 604.827.2060 or online by visiting investigationsoffice.ubc.ca