

INFO 490/690C: Introduction to Social and Cultural Analytics

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Course Description. This course introduces the use of computational methods for studying culture and society. We will learn how to transform textual and visual material into data, and how we can explore and analyze this data using machine learning and statistical models as both quantitative and qualitative tools. We will also survey and discuss how these methods are applied within the humanities and social sciences, as well as reflect on the challenges, limitations, and ethical issues that arise in the computational study of culture and society. 3 Credits.

Course Prerequisites.

INFO 490C: INFO 248 or Permission of Instructor.

INFO 690C: None. Basic experience with Python, introductory data science, or other introductory programming experience is recommended but not required. All required programming and statistical concepts will be introduced in this course.

Course Goals. Through this course students will:

- become familiar with computer-assisted methods for studying culture and society;
- be able to construct nuanced arguments using data and computational methods;
- gain an understanding of when a computational method is both applicable and useful (and when it's not), as well as how to critically interpret its output;
- develop proficiency in using Unix commands and Python for analyzing social and cultural data;
- be able to conduct computer-assisted scholarship in conjunction with faculty.

Course Materials. This course has no required textbook. Readings for this course will largely be available online and will otherwise be made available via Moodle.

Assignments & Grading.

Grading Scale. F = <63.49, D = 64-66, D+ = 67-69; C- = 70-73, C = 74-76, C+ = 77-79; B- = 80-83, B = 84-86, B+ = 87-89; A- = 90-93, A = >93.49

Assignment Categories & Weights.

- Discussion Board – 20%
- Homework Assignments – 30%
- Final Project – 40%
- Course Reflection – 10%

Discussion Board.

For each week's reading assignments, you will need to post a response guided by a short prompt on some of the readings. Additionally, you are required to reply to at least 2 of your classmates' posts. Initial posts will be due by 11:59pm ET Thursday and responses are due by 11:59pm ET Sundays. These posts will be graded on a scale of ✖, ✓-, ✓, ✓+.

Homework Assignments.

For each week's topic there will be a homework assignment containing a mixture of coding and short written responses (the ratio will vary by week).

Final Project.

You will complete a final project on a topic and dataset of your choosing. In this project you will (1) explore and analyze a collection and (2) operationalize a research question using computational methods covered in this course. This project will be broken into several components including an exploratory data analysis, progress report, final presentation, and final report. Students in 490C will work in groups of 2-3. Students in 690C can work alone or in groups with expectations for groups raised proportionately.

Course Reflection.

In lieu of a final exam, you will write a reflection on your learning and experiences in this course.

Graduate Section.

Students enrolled in 690C will have an expanded set of expectations:

- *Discussion Posts.* You will have an expanded role in discussion posts. You will also create a small number of posts through the semester that summarize research papers/projects in social and cultural analytics (broadly construed) suitable for the whole class. The works described will be a mixture of suggested readings and works connected with your primary research field and interests.
- *Final Project.* Your final project is expected to have wider scope and culminate in a research term paper that is more ambitious and in-depth than the corresponding field report for 490C groups.
- *Supplementary Materials.* While all programming and statistical concepts are introduced in class, additional materials that reinforce these concepts will be provided.
- *Separate Meetings.* An occasional separate meeting of 690C students will be held. These meetings will be used to field questions about course concepts and research projects as well as deeper discussion of course readings.

Policies.

Late Work Policy.

Listed below are the blanket late policies for this course. If you should need an extension, please contact the instructor in advance to discuss your situation. In case of unforeseen circumstances (e.g. illness, internet issues, personal emergency), please contact the instructor when you're able.

- *Discussion Posts.* Late posts will be accepted but for reduced credit. For posts submitted within 24 hours, grades will be capped at ✓. Borderline cases will be rounded down. Posts submitted more than 24 hours late will receive a ✓- if they are of ✓/✓+ quality.
- *Homework Assignments.* You will receive 3 slip days for homework assignments. A slip day provides an extra 24 hours to submit an assignment. Slip days are applied automatically with at most one slip day used per homework assignment. Beyond slip days, a letter grade (10%) will be deducted for each day that an assignment is late.

Accommodation Statement. The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements. For further information, please visit Disability Services (<https://www.umass.edu/disability/>)

Academic Honesty Statement.

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (https://www.umass.edu/dean_students/codeofconduct/acadhonesty/).

Inclusion Policy. In this course, each voice has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support UMass Amherst's commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disability, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

I reserve the right to modify this syllabus as needed to account for current events and to better support student learning.

Acknowledgements.

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