# Carleton University (Winter 2018) Department of English

## ENGL2401 / DIGH2002: DIGITAL HUMANITIES: THEORY AND METHOD

Prerequisites: second year standing.

Monday, Wednesday / 4:00 – 5:30 p.m. Location: 417SA

(Please confirm location on Carleton Central)

Instructor: Chris Tanasescu (MARGENTO)
Email: chris.tanasescu@carleton.ca

Office: 1906DNT Phone: 613-858-3788 Office Hours: By appointment

A multidisciplinary survey of core theories, methodologies and tools within the Digital Humanities. Assignments will include collaborative work and applied projects. Prerequisite(s): second-year standing.

What is data, what is a dataset, what is a database, how can they be structured and why is that of any importance to a student/scholar, and moreover, how could that help them with their work? Digital Humanities (DH) tries to answer those questions while generating, deploying, and analyzing the digital tools involved in the tasks attendant to such concerns. How do the uniquely specific (and at times difficult, if not impossible to pin down) features of art, literature, and the humanities in general get to be translated into digital formats, how successful can be that translation, and what are its underlying assumptions? And, to what extent does it actually reshape the 'traditional' subjects, disciplines, and arts in the process? Symmetrically, what are the current challenges and trends in such more traditional fields that are or aren't (yet?) significantly addressed by DH?

We will try to investigate such questions while delving into the DH tools deployable for various practical, academic, and research related purposes. How do we generate, clean, explore, and/or employ structured data, and which structuring options is best for our project(s)? How do we visualize data? How do we create digital maps and what mapping tools are the most suitable for our work or interests? Can we put together a website or a collaborative platform-like digital edition? What tools are there available for the digital historian, and how do they work? What is textual analysis, what are its benefits and pitfalls, and how do we perform it computationally? What are the best approaches and apps in digital literary studies? What is computational linguistics; what is computational analysis and what natural language processing tools can help with that? What is and how can one analyze or experiment in (post)digital poetry and e-lit? What is network analysis, what is the relevance of network graphs, and how could we use social media networks, crowdsourcing, and network (graph) theory apps in our DH projects and research?

In investigating such questions we will once in a while base our research on the place and importance of the human body in DH and on how the interlocking of digital tools or algorithms with our own minds and senses can play a crucial role in critically engaging our culture and in opening up new avenues for critical thought and creative endeavors. Where is for instance sound or noise in DH, how does our hearing shape digital space, and how could we use the sonic in dynamically structuring and interactively building our DH projects?

While learning to do the things above and more, we will also question the theoretical, philosophical, cultural, and political assumptions behind various digital tools, formats, and methods, and we will investigate what new relevantly innovative approaches could be devised and implemented—or at least imagined—to respond to the ever evolving challenges of our global (post)digital world and culture. No computer science or coding background is required but the students are expected to be willing to familiarize themselves with and learn to use—individually or in teams—new digital tools and applications relevant to the humanities.

## **Topics:**

#### WEEK 1

Introduction. General Outline, Academic Context, and Assignment Discussion. Seminar Signup

## WEEK 2

Datum, Data, Dataset, Database. Metadata. Big Data and Data Intensive. Data Science. Critical Data Studies. Data Collection, Cleaning, Annotation, Classification, and Processing

### WEEK 3

Visual, Visualization, Video

### WEEK 4

Sound in DH. Sonic Economy, Chaos Media, and Digital Space. Sonic Digital Ekphrasis (Reconstructing Historical Soundscapes). Virtual Galleries and Museums for Sound. Digital Sound and Mobile Environments. Acousmatics, Soundscapes, and Writing with Sound. Multimodal Composition and Multimedial Books. Music Information Retrieval. Automatic Composition. Sleep Musicalization

#### WEEK 5

The Body in DH. Corporeal Corpora; Body of Data and Body Data. The Old Bailey Proceedings and the Digital Panopticon. Tactile and Breathing Digital. Machine-body Body-machine. Hyperreal Body, Digital Gender, and Transversal Technologies

#### WEEK 6

DH and New Media. New Media and Modeling: Games and the Digital Humanities. Digital Bo(i)d(entit)y beyond New Media. Trans- and Metamedia. Convergence and Polymediation and Their Relevance and Applicability in DH

## WEEK 7

Reading Week – no classes

### WEEK 8

Space, Time, and Space-time in DH. GIS. Thick Mapping; Digital and HyperCities. Maps & Timelines. Space, Game, Narrative. Locative Apps, (Social-Media-Based) Hyperlocality, and Digitally Performing Place and Community

## WEEK 9

Text Analysis 2.0. Corpus Analysis, Term Extraction, Concordancing, and Colocation: AntConc, Topia, Termostat, and Further Applications and Repurposing. Literary Text Analysis: heureCLÉA, Guten Tag, The Graph Poem Project

#### **WEEK 10**

Natural Language Processing. Tokenization, Part-of-speech Tagging, Named Entity Recognition, Parsing, Coreference. Word-vectors and the Vector Space Model in Representing Text. NLP, Information Retrieval, and Text Mining Algorithms and Methods. BOW, TF-IDF, LDA, LSA. Automatic Document Classification

### **WEEK 11**

Term Test;

The Semantic Web. Linked Data. Graph Databases; RDF vs. LPG

#### **WEEK 12**

Network Analysis I. Social Media Analysis. Opinion Mining and Sentiment and Emotion Analysis. Employing Social Media Networks and Crowdsourcing in DH Research

### **WEEK 13**

Network Analysis II. Neural Networks and Deep Learning. Graphs and Graph Theory Applications in DH. New Directions and Challenges in DH

#### **WEEK 14**

Final Project Presentations and Discussions

## **Required Term Assignments**

- a. 1 seminar (20-25 min) on a scholarly article and/or DH tool(s), due in assigned class -20%;
- b. Attendance, participation, workshop, and discussion group contributions 20%;
- c. Term Test (1h 30min) 30%;
- d. In Class Final Exam Essay-Project with Rapid Fire Presentation/Demo 30%.

#### On the In Class Final Exam:

An essay-project due WEEK 14—at least 1500 words, half on the general DH context and related previous work in the field, and half on your own digital project. The project will be presented/demoed in class in WEEK 14 according to previously established scheduling, those two classes being reserved for covering all project presentations. The essay accompanying the project as well as the presentation, demo session, and discussion will also represent opportunities for the author to expand on the possible further development of the project and its relevance and ramifications in DH, while also compensating if case be for the technical issues or more complex tasks and affordances that have not been solved or sufficiently developed as of the date of submission (but which the instructor has been notified about beforehand). Although no actual computer programming or coding elements are expected or required, reference to that in the general context of the subject matter will be appreciated, and so will be ideas regarding or even tentative steps towards a collaboration with (a) programmer(s) over the future further development and implementation of the project in various relevant contexts. On handing it in, each author will give a 10-15 min presentation while demoing the project, and then will take questions from the course instructor and classmates. Team projects are also accepted as long as the basic concept along with the team lineup and each member's responsibilities are submitted to the instructor no later than WEEK 5. All students are strongly encouraged to discuss with the course instructor their project idea, outline, and references as early as possible and throughout the duration of the course but no later than WEEK 10.

## **Bibliography:**

Conventional publications and hyperlinks alongside digital tool webpages, computational repositories, open source code, and tutorials require special format and are therefore made available on the cuLearn course webpage and Ares and where needed will be specifically presented by the course instructor in class.

## **COURSE REGULATIONS:**

The mark distribution for the year will be Term Grade: 100%. Class participation marks will include participation in class discussion, response to written comments on graded assignments, consistent attendance, and full reading preparation for each assigned text. As consistent attendance is expected in this class, students are required to attend an absolute minimum of 50% of the classes; students failing to meet this minimum requirement will not have their assignments graded.

All assignments must be handed in on the date specified unless cleared previously with the professor. Papers must be handed to me in person or to the drop box in the English department office (1812 Dunton Tower) on the due date. If you choose to use the drop box, you must be prepared to incur any late penalties that may accumulate due to the unlikely occurrence of the paper's loss or misfiling. Late papers and projects will be penalized 2% per day that the assignment is overdue. Papers without medical extension will not be accepted after two weeks of the due date. No faxes or emails of essays will be accepted. Please keep a copy of your assignment in case of loss by any cause. Students can expect to receive graded feedback in a timely manner; the instructor reserves the right to limit commentary on late essays. Students are required to submit all major assignments (essay, digital project, and term test) in order to pass the course as a whole.

## **CLASS ETTIQUETTE:**

Turn off cell phones during class time. Text messaging is not allowed during class.

## **GRADING SYSTEM:**

Assignments in this course will be graded using the letter grading system: A-, A, A+ (Excellent); B-, B, B+ (Good); C-,C, C+ (Satisfactory); D, D+ (Minimal pass); F (Failure). Percentage conversion: A+ (90-100%), A (85-89), A- (80-84), B+ (77-79), B (73-76), B- (70-72), C+ (67-69), C (63-66), C- (60-62), D+ (57-59), D (53-56), D (50-52), F (0-49).

#### **PLAGIARISM:**

The University Senate defines plagiarism as "presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own." This can include:

- reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings;
- failing to acknowledge sources through the use of proper citations when using another's works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

For more information please go to: <a href="https://carleton.ca/registrar/academic-integrity/">https://carleton.ca/registrar/academic-integrity/</a>

## LATE ASSIGNMENTS:

Failing in handing in assignments on time will result in a 10% decrease in final grade per day of delay.

## REQUEST FOR ACADEMIC ACCOMMODATION:

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

**Pregnancy obligation**: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the **Student Guide**.

**Religious obligation:** write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).