
DIGITAL TOOLS IN CONTEXT in Spring 2021 (CM5018)

Course Code	CM5018	Professor(s)	Charles Talcott, Georgi Stojanov
Prerequisites	None	Office Number	G-402
Class Schedule	M: 12:10-13:30 in Q-509 R: 12:10-13:30 in Q-509	Office Hours	Tuesday 3-5pm Friday 9-11am and by appointment
Credits	4	Email	ctalcott@aup.edu, gstojanov@aup.edu
Semester	Spring 2021	Office Tel. Ext.	x575

Course Description

We are living in an age of accelerated digitization, datafication, and ubiquitous computing. Digital tools have enabled us to engage with endless communicative possibilities, revolutionizing societies, industries and markets while also radiating tremendous 'media effects.' How can we begin to 'peel' back the layers and take a peek 'inside' to better understand the architectures and affordances of the digital? How are we to understand and 'know' how these digital tools operate? What's inside the 'blackbox' of 'the digital,' behind the array of screens, within the networks, codes & platforms that ensure hyper-connectivity? This theory/practice hybrid course will enable students to build a critically informed understanding of digital environments, cultures and applications through a series of practical hands-on digital projects. Students will develop fundamental competence with a selection of tools, platforms and digital workflows used for data collection, management, analysis and visualization, and be prepared for greater digital literacy and productivity in the communications industry. In parallel, the use of these digital tools will be problematized in relation to recent cultural, economic and political transformations. Contextual factors to be studied may include the rise and impact of algorithmic cultures, the proliferation of software, and the ethics of big data. Students will move forward with an empowered, responsible and questioning approach to some of today's indispensable digital skills. The course is divided into three sections: **platforms, processes & projects** (our 3P's). We begin with an introduction to the basic 'platforms,' 'tools' and operations and how they interact with each other: from websites, html & css, coding and data scrapers to data structuring tools and data visualizers. We will explore some coding and programming here, too. We will then begin to work on 'processes' and investigate workflows, applications, digital methods and problem-solving. We will 'contextualize' the platforms and tools in order to explore and investigate major issues involved with datafication, digitization and ubiquitous computing. Students are encouraged to discover their 'digital affinities' and optimal workflows in order to develop emergent practical expertise while also identifying important issues within digital cultures and digital industries.

Course Learning Outcomes

understanding of the processes and tradeoffs connected to the analysis of data sets in order to draw conclusions about the information they contain
working knowledge of some of the digital tools supporting data collection, management, analysis and visualization, and programming
ability to apply this knowledge to professional communications scenarios and contexts
critical understanding of current debates around the role of data, algorithms and software in a globalized digital media context.

General Education

This course contributes to the student learning objectives of the MAGC program:

- Understand and be able to use qualitative Communications research methodologies;
- Be aware of key issues in debates about globalization and their relationship to forms of global media and culture;
- Develop critical perspectives on the major concepts and theories in Media Studies, Communication Studies and Cultural Studies
- Develop practical competence in a field of contemporary communications

Course Outline

Dates	Digital Tools	Contexts	Reading & Ma
PLATFORMS Introduction to the fundamental tools, platforms, interfaces: websites, html, spreadsheets, visualizers, coding & text editors			
Week 1	The 'Digital'... Languages, Layers, Command & Control Environments	Peeking under a website Mark-up languages	 https://www.w3.org/

18 Jan	Introduction:	Working with a mark-up language	
21 Jan	What is a webpage? Seeing the layers Identifying HTML 'Hacking' a webpage Command + Control Creating a scratch webpage	Setting up server storage Setting up collaborative work spaces Setting up your personal MyCM5018Journ.html page which you will be updating constantly by publishing each in-class exercise as well as homework assignments submitted	Storage.aup.ed
Week 2	Manipulating DATA	<u>Datafication</u>	Gregg and Nat annotation exer
25 Jan	The 'handwork' of the digital	Thinking 'digitally'	Spreadsheets(B
28 Jan	Data sources and data formats (text, numerical, pictures, videos...); geo data; Our bodies as data sources; Using Google sheets to visualize data	Data as an 'isolatable' What can be measured by digital data, and what kinds of knowledge do they produce? How compatible are quantitative data and qualitative representations of people, feelings and experiences?	https://docs.google.com/spreadsheets/ Data & Digital S Building Timelin https://timeline.kiddle.com/
Week 3	<HTML> MARK-UP LANGUAGE	How is data gathered, scraped, mined? How are large data sets collected and analysed by institutions for political purposes and by corporations for financial purposes? What are the implications of these practices?	Explore w3schools Build a scratch Deploying exten
1 Feb	HTML, CSS, and the w3schools.com resource;		
4 Feb	Collecting and organizing data;		

	Gathering data; Imagining Workflows. Introduction to Scraping		
8 Feb	No classes on Monday University mini-break February 8-10		
Week 4	<CODE>		
11 Feb	Introducing 'code' Visual v. Acoustic coding Programming Sequences A taste of Python	What is coding? What is an algorithm? How does code operate? Where does one 'code' and to what end?	Anita Joseph. S To Read "What 2015 [The Long Vers Paul Ford. " Wh Bloomberg.com https://repl.it/
Week 5	<CODING>	Coding in Context	
15 Feb	Coding with Python	What is the relationship between the practice of coding and 'communication'?	Sam Williams "
18 Feb	Digital Communication & 'Conversation Agents' Designing & mapping Communication and Computational workflows	How does one design and develop digital communications?	Coding in Python pre-screening C Repl.it Diagram.net
Week 6	<CODING>	Perceiving communication and	Embedding you

		'natural language' digitally.	ChatBot into yo
22 Feb	More Python Sharing our Chatbot prototypes	Language as <script> What does the process of 'coding' language reveal about communication? What does it mean to reconceive language digitally?	
25 Feb	No classes on Thursday University mini-break February 24-26		
PROCESSES & Projects Workflows, Data, Data Gathering, Digital Methods, Digital Problem-solving			
Digital Visualization			
Week 7	Data Research	What is correlation?	Importing data
	Data Visualizations	How does it differ from	conducting data
1 Mar		causation? What is 'correlative thinking'? Why is data correlation so	
4 Mar	Understanding and working with 'Correlation'	powerful & pervasive?	Reading: Excerpt <i>SuperFreakonomics</i>
		What are the consequences of 'correlative thinking'?	
	<DATA> Mapping		Communicating with Maps
	Data Visualizations		Building data v
			Google maps
			DataWrapper
			Maps.google.co
			https://www.da
Week 8	Mapping Tracking, Tracing, Triangulation, GPS	Location, Location, Location!	Neff and Nafus
			Chp 1
8 Mar		Self-Tracking with Digital Devices	
	Augmenting Reality		
11 Mar			PokemonGo

	An intro to AR	Layers: Vectors, Rasters	
Week 9	The Face of the Digital 	Case Study: The “Face of Data”	Cheney-Lippold
	The Digital Face		<i>We Are Data: C</i>
15 Mar		Facial Recognition & Surveillance	
18 Mar		The Ethics of the Digitized Face	Recommended
		Deep Faces Deep Fakes	<i>The Human Fa</i> 2014.
Week 10	The Digitized Mind	Case study: Understanding the psychometric origins of	Rust, Kosinski,
	Psychometrics		<i>Modern Psycho</i>
22 Mar		Cambridge Analytica	
25 Mar	Gamification	User Experience	Kitchin and Do
		Digital Affect	<i>Code/Space: C</i>
	Doing Digital Research		
	Civic Media Projects		Manovich, <i>Soft</i> Introduction
Week 11	Networks & Platforms	What is a network?	Introductory ch <i>Course in Netw</i>
29 Mar	Understanding Networks	How does one conduct network research? How do you visualize a network?	Nick Snierck, e
1 Apr	Visualizing Networks		<i>Platform Capita</i>
	IoT the Internet of Things	Networked materiality	Kitchin and Do
5 Apr	No classes on Monday University Holiday April 5		
Week 12	Algorithms Redux	Algorithms: Datafied Identity, Culture and Politics	Rodrigo Ochiga “Informatics of

8 Apr	Coding algorithms How do they operate? How does correlative data processing generate algorithmic bias? What is 'algorithmic justice'?	How is the experience of digital platforms shaped by algorithmic calculations? How do algorithms construct identities, relationships and publics among digital media users? What kinds of control can algorithms be used to exercise control, and how can they serve social, political and economic objectives?	https://logicmatters.net/the-oppressed/ Gillespie, "The Algorithms" Rosenblat and Nissenbaum, "Data and Information"
Week 13	Artificial Intelligence	What is AI? What is ML?	Kate Capeshaw
12 Apr	Automating automation	What infrastructures and materials and process enable AI?	https://www.youtube.com/watch?v=gqPnmDDc
15 Apr	ML Machine Learning	Where is 'human' communication and human 'intelligence' within an AI-ubiquitous world?	
	Emergent digital 'intell/igence'		
PROJECTS Civic Media Projects, Workshopping & Troubleshooting Data Sprints			
Week 14	Civic Media Project workshop and troubleshooting		
	Reviewing website development, CSS styling, data gathering, correlations & visualization		
19 Apr	Building a Digital Story for your research		
22 Apr			
Week 15	Last class		
26 Apr	Data Sprint!		

	*** Digital Futures ***
May 3	Final Civic Media Digital Contexts Project Due
Monday	Final 'exam' presentation & wrap-up session
May 10	Project Presentations & Discussion
	Monday May 10 6:30pm-9:00pm

Textbooks

This course doesn't have any textbook.

Attendance Policy

Attendance at all classes is mandatory, and active participation in discussions is a class requirement and forms a component of final grades. Unexcused absences from class will result in a lower grade for participation; excessive absence may result in failure. Please contact us in advance if an absence is likely.

COVID-19 TEMPORARY AMENDMENTS

Students studying at The American University of Paris are still expected to attend ALL scheduled classes. Due to the Covid-19 pandemic, students will have the option of attending classes remotely when special circumstances apply. For example, when students are placed under quarantine by the French authorities or by their doctor, or when students present symptoms of Covid-19 and are directed, by their doctor or the AUP Health Office, to remain home. It is still the student's responsibility to be aware of any specific attendance policy that their professor might have set in the course syllabus. In particular, Students attending remotely

from distant Time Zones should check with their professors about the specific attendance policy for remote learners.

AUP ATTENDANCE POLICY

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member might have set in the course syllabus. Academic Affairs will excuse an absence for students' participation in study trips related to their courses.

Attendance at all exams is mandatory.

IN ALL CASES OF MISSED COURSE MEETINGS, THE RESPONSIBILITY FOR COMMUNICATION WITH THE PROFESSOR, AND FOR ARRANGING TO MAKE UP MISSED WORK, RESTS SOLELY WITH THE STUDENT.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may recommend that a student withdraw, if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and *especially during the Drop/Add and Exam Periods*.

ENGLISH LANGUAGE PROFICIENCY STATEMENT As an Anglophone university, The American University of Paris is strongly committed to effective English language mastery at the undergraduate level. Most courses require scholarly research and formal written and oral presentations in English, and AUP students are expected to strive to achieve excellence in these domains as part of their course work. To that end, professors include English proficiency among the criteria in student evaluation, often referring students to the university Writing Lab where they may obtain help on specific academic assignments. Proficiency in English is monitored at various points throughout the student's academic career, most notably during the admissions and advising processes, while the student is completing general education requirements, and during the accomplishment of degree program courses and senior theses.

Grading Policy

In this course, students will work in two assignment formats: collaborative project work to demonstrate practical skills; and individual work to demonstrate critical thinking. Final grades will be based on the following assignments:

1. **Class Participation 10%** This grade will be based on your ability to offer regular, productive and informed contributions to class discussions and activities. You must come to class having read all required readings and be prepared to offer critical responses. Absences from class and lack of preparation will lower this grade. Four absences or more will result in an F for this component.
2. **Contexts | Critical Response Web Journal, Short Reflections on Topics, Readings & Videos 20%** You will keep a web journal in your ac.aup.edu storage. For certain topics you will be asked to write a critical response to readings, topics and videos. The critical response should first provide a *brief* summary of the main argument of the chosen reading/s, but will primarily offer a few points of critical evaluation of each author's contribution to the topic. The assignments will take a variety of forms, from written responses that you will post into your personal website and then link to our TEAMS Assignments window to FlipGrid video critical response.
3. **Tools | In-class and Homework Exercises, Projects & Sprints 20%** The computer lab/digital tools portion of this class involves the accumulation of specific practical skills and knowledge. A range of exercises to sharpen these skills will take place in class and will be set for homework.
4. **Digital Media Project (Due May 3) 40%** Individual and groups of two maximum: you will devise a professional-style brief for the development of a digital media project which will be presented at the end of semester to a jury. The final deliverable, presented at the end of semester, will include: a detailed description of how the project responds to the specific communicational demands of the brief; an account of the anticipated application within its professional context; and a multimedia presentation of how the completed digital solution addresses the requirements of the brief
5. **Digital Media Project Presentation (May 10) 10%** Each student will present (individually or in groups of two) the final media project.

Other
