

COM 355: Digital Media Futures

Course Outline and Syllabus

Instructor: Dr. Andrew Klobucar
Office: CULL428
Phone: 973.596.5724
Email: Klobucar@njit.edu

Office Hours: TR 1:00-2:00 pm; W by appt.
Classroom: FMH 305
Term: Fall 2023 (F2023)

Course Format and Objectives

This class will meet on Tuesdays and Thursdays from 10:00 am to 11:20

Required: Humanities 101/102. Technical prerequisites require consistent, secure access to a personal computer with up-to-date word processing and graphics software (e.g., HTML5 and/or a trusted video player), along with high-speed internet, as most of the works will be read via screen.

Please refer to the course schedule for details on the assigned readings. Students are expected to read and be familiar with the assigned weekly reading as the course progresses. In addition to reviewing the weekly reading, please create and keep track of your own reading notes, questions, and discussion topics.

Duration: 6 September – 13 December 2022. This course provides three credits for a Humanities course at the undergraduate level. Students should anticipate a workload of 6-9 hours per week, including class time, to fulfill course requirements.

Digital Media Futures

General Objectives

Whether we think of writing or even speaking to each other orally as active modes of communication or simply a method for recording and organising our thoughts, it is fundamentally a technology. The cultural and social shift over the past 70 years from analogue to digital media has made this core relationship between writing and technology ever more robust and complex. On the backend, programmers have developed myriad coding languages to run increasingly intricate software across our screens and terminals at faster and faster speeds. On the frontend, we have at our disposal exceedingly diverse ways to communicate with each other, using imagery, text, sounds and their elaborate combination. Clearly, all texts, beginning, perhaps, with language itself, when distributed in a digital format, seem to have undergone a unique transformation. Digital texts reveal epistemological capacities and functionalities that were barely imaginable even in the print era. And now, with the recent development of GAI, many professionals across all sectors of society believe even human consciousness needs to be reimagined in terms of digital media. This course takes as its primary focus the question of what it means to use language and texts as literal tools of computation that continue to build an ever-changing digital environment.

Instructional Objectives and Learner Outcomes

By the end of this course, students will

- be familiar with an extended history of writing technologies, emphasizing digital texts and computational devices.
- be able to identify, describe, and evaluate key characteristics of media and representation as distinct tools and technologies to help us both understand and interact with the physical world.

- be acquainted with key historical examples as well as relevant theoretical issues and debates in digital media, beginning with cybernetics, hypertext theory, hypertext fiction, digital art and contemporary gaming discourses.
- develop digital media reading and writing techniques through hands-on learning
- Produce a multimedia, digital research project, including all stages of production, from brainstorming to presenting the final product.
- Develop key learning points in digital formatting and a deeper understanding of GAI and why it signals a new era in digital learning and media production.

Course Assessment: Exercises and Assignments with Grading Schema

The assignments for this course include a mid-semester assessment (based on assigned readings), an individual short research project (to be completed in stages), and a presentation. In addition, there are ongoing discussion forums and interactive activities via Canvas.

Course Assignment Breakdown:

Participation: 10 marks

Reading Response Forums

(4 total @ 5 marks each): 20 marks

Creating in the Digital World:

1. **Data Self-Portrait:** 5 marks

2. **Drawing in JS:** 5 marks

3. **AI Book Production:** 5 marks

Investigative Study: 10 marks

Twine Interactive Story

(2 Parts @ 10 marks each): 20 marks

Final Research Project: 20 marks

Presentation: 5 marks

Punctuality, Participation, and Attendance:

Each weekly in-class session will offer learners multiple opportunities to discuss and probe topics relevant to the course via individual input and group debate. This activity level in the course is worth **10 marks** and will be assessed according to the frequency and relevance of each contribution. My pedagogy emphasizes a learner-active approach to in-class assignments, where I hope learners lead discussions as often as I, your instructor. Learners are encouraged to introduce material and ideas they believe are relevant to the topic at hand. Independent learner-led seminars can be scheduled one week in advance as requested. Learners are expected to attend every class.

Absences due to illness must be confirmed a *minimum* of **4 hours** before class by email to avoid penalty. In-class activities and general participation will account for **10 marks** and will be based on both the frequency, relevance, and available quality of the learner's comments, questions, and observations. More than six **unexcused absences (3 weeks of the curriculum)** will result in automatic course failure; excessive unexcused lateness of 20 minutes or more throughout the course will be considered one absence. Learners who expect to miss classes or exams because of religious observance or athletic events must submit to their instructors a written list of dates that will be missed by the end of the second week of classes. Learners are expected to make up missed work.

- **Suppose a class cannot be attended for any reason other than physical illness. In that case, I must be notified a minimum of one day before the class is scheduled to enable me to prepare alternative access to the same material.**
- **Extra time to complete all individual assignments must be petitioned in writing at least one week (7 days) before the assignment is due.**
- **Assignment drafts or requests for assignment-specific advice must be scheduled nine days before the assignment's due date if extra help is to be delivered in a timely fashion.**

Alternative submission access for late assignments and extra course material will be provided for each graded task; however, late assignments and missed classes outside these guidelines will be penalized. Late assignments will be deducted 10 percent of the task's course value up to 1 week after submission. Late assignments will be deducted 20 percent of the task's course value from 8 days to 2 weeks after the submission date. Late assignments will be deducted 50 percent of the task's course value from 15 days to 4 weeks after the submission date. Assignments missing for more than 4 weeks will not be accepted. No late assignment will receive commentary supplementary to its graded evaluation.

Proper and accepted communication guidelines help minimize the risk of penalty in terms of grading as well as critical commentary. Compromising your access to resources, including the time you may need to complete each assignment, can be seriously incapacitating, preventing you from learning the actual skills and approaches required

to understand the course material. This will remain a very serious risk throughout the term. Providing information as early as possible concerning any challenges you are facing this term will enable me to work with you more effectively and conceivably prevent the assigned work from overtaking your abilities. Losing access to the course material and my assistance strongly risks a withdrawal or a grade of F by the end of the term.

Learner success in this course demands consistent access and proper use of these electronic resources is the student's responsibility, as it is assumed that their general availability is constant, 24/7. If technical problems with the software or any specific interface occur during the course, it is up to the student to contact either the professor or one of the IT/Help resources associated with the website as quickly as possible.

Assignment Submission Policies:

In addition to general in-class activity, specific projects and tasks assigned for electronic submission include forum discussions, two research reports, creative workshops emphasizing innovative approaches to our topics of study, and one major research project scheduled to be completed by the end of term. Each exercise will be delivered and introduced in class according to the schedule now available by syllabus. Unless otherwise indicated, all assignments must be submitted before 11 p.m. on the prescribed due date.

Course Policy on the Use of AI Content Generators for all Writing Assignments

Writing practices are being drastically transformed by advances in Artificial Intelligence (AI). AI productivity (e.g. ChatGPT, Grammarly) are acceptable and encouraged for use in this course with the following guidelines are:

- **AI-generated texts *cannot* be submitted as original work for assessment. However, AI content generators can be used for early drafts. Learners are expected to revise and submit an original draft for final assessment.**
- **Extra cover sheet with the following details must be submitted with your assignment, including:**
 1. **name of AI content generator used.**
 2. **date used.**
 3. **prompt or prompts submitted to the AI content generator.**
 4. **The full AI version of all prior drafts with the final document the student has revised and written for assessment. Revisions must be indicated in the draft.**

Learners not in full compliance with this policy will receive an automatic F.

Individual Assignment Descriptions:

Reading Response Forums:

The course requires learners to respond to four **Forum Discussion** questions distributed at various points across the course. Each discussion you submit will be divided into two responses for a total of 5 marks. These questions will offer learners the opportunity to respond individually to a topic, or reading discussed that week in class. The discussion entry will be delivered online in two parts: a direct response to the original question and a reply to one other learner's retort. Each of the two responses must be a minimum of **250 words** but can be included in a single response for **500 words**. **2.5 marks** will be awarded to the direct response, and **2.5 marks** will be awarded to the retort. Additional responses are encouraged to keep the discussion going, but the assessment requires only two.

Investigative Reports and Creative Explorations:

Three creative media projects and one investigative report will be assigned and presented for discussion in class. The media projects will ask you to construct three different digital media devices, while the report will give learners the opportunity to explore and conduct a primary study, supported by independent research on a topic of their own choice. Specific guidelines for each project and the report, along with a general prompt will be provided on the **Canvas** site with the submission link.

Twine Interactive Story:

A two-part creative project will be assigned at mid-term designed to give learners the opportunity to learn and build their own interactive story with the multimodal tool editing tool Twine. The stories can take the form of strategic narratives, games, or simply non-linear fiction that allows the reader an interactive role in how the story develops. In-class workshops will allow students to learn how to work with Twine using Harlowe 3.3.7 formatting with additional lessons in CSS and even JS augmentation. The project is worth 20 marks divided into two parts (**10 marks each**) to help learners develop a basic draft, followed by a formal, publishable story for their program portfolios.

Final Research Project:

The final assignment will be assigned in week 12 of the course, giving the learner three weeks of workshopping and development time to research and produce a digital media project on a topic of their own choice, based on any of the ideas and questions we've asked ourselves over the prior weeks. The project can be produced in a modality of the learner's choice, whether an interactive digital study, a strategic "walk-through" narrative, a game, or a traditional print paper. Whatever modality is chosen, each project will include a digital presentation submitted separately. The project is worth 25 marks and is due during Reading Week. **20 marks** will be allocated for the project and **5 marks** for the presentation.

Grading Profile

A= 90-100	B+= 86-89	B= 75-85	C+= 70-74	C= 60-69	D= 50-59	F= 0-49
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Course Syllabus

Date	Topic/Readings	Tasks/Assignments
Week 1 5-7 September	Histories and Introductions Technological Innovations in Media In terms of technology and practice, how we literally record and represent the world has evolved into a very complex and substantial set of questions about the relationship between the reality the world and its representation in any media modality. How accurately does writing relate to thinking and feeling? Are we really "capturing the moment" when we try to organise our thoughts and record our histories through any mode of representation.	In-class Introductions: General Questions, and discussions about the course structure and its main themes and objectives. Read through the syllabus and outline carefully and please don't hesitate to ask questions in-class on 7 September.
Week 2 12-14 September	The Modern Epoch There's a Problem Here: Reality and its Appearance It seems many cultures and societies throughout history have had surprisingly similar debates on how closely related our capacity to represent how reality appears to us and its actual existence. We can record its appearance, but does that mean we are recording reality? Our most currently accepted argument that the two correspond remains Descartes' famous argument published in 1641. Over the next two weeks, we'll begin with a critical look at the epistemological revolution Descartes provoked and see what we think? Readings: <ul style="list-style-type: none"> Rene Descartes, <i>Selections from Discourse on Method and Meditations on First Philosophy</i> (1637, 1641) 1998 edition 	Reader Response Forum 1: Reality and Appearance -- Did Descartes Solve the Problem? (Due 21 September – 5 marks)
Week 3 19-21 September	The Modern Solution: Science, Media Technologies, and Skepticism The next two weeks give us an opportunity to discuss the fascinating interrelationship between Cartesian Skepticism, scientific methodology and the ongoing development of modern media, beginning with print and moving through advances in modern technologies that helped science develop an entire way of thinking where the right tools and the right methods can produce accurate ways of understanding the world in which we live.	In-class Discussion of Descartes and Cartesian Skepticism, and the Technologies and tools of Modern Media. Media Special Assignment 1: Data Self-Portrait (Due 28 September – 5 marks)
Week 4 26-28 September	Solving the "Crisis of Reality" through Technology and Scientific Methodology Readings: <ul style="list-style-type: none"> Fredrico Campagna, "Technic's world," from <i>Technic and Magic: The Reconstruction of Reality</i> (2018) 	In-class Introduction and Workshop to Twine Data Self-Portraits Due Reader Response Forum 2: When the Text becomes a Machine. (Due 5 October – 5 marks)

<p>Week 5 3-5 October</p>	<p>The Atomic Epoch: 1920-1960 Science “Explodes:” Science, Media and the New Principle of Uncertainty</p> <p>Wrong Tools and Wrong Worlds Shortly after World War I, a new era of political, social, and economic disorder emerges, likely beginning with the great pandemic of 1917. Science and its methodologies based in skepticism and material evidence also become questioned as technological advances in atomic physics begins to produce a strange discontinuity and set of paradoxes that cannot be possible if Newtonian methods and Cartesian reasoning are correct. Quantum theories emerge followed by similar political, economic, and cultural revolutions. The new era seems dominated by a shared sense of disorder and uncertainty. New media emerges and computational networks lead the way to new modes of expression, communication, and literacy.</p>	<p>Reader Response Forum 3: Cyborgs, Monsters, or Both? (Due 12 October – 5 marks)</p> <p>In-class Workshop using Twine to write interactive narratives</p> <p>In-class Discussion of Capagna and Technics.</p>
<p>Week 6 10-12 October</p>	<p>Cybertexts: Writing Inside/with the Machine In the early postwar period (after World War II), computation is still in its infancy but clearly strange, new possibilities about communication technologies begin to emerge, offering more possibilities in</p> <p>Readings:</p> <ul style="list-style-type: none"> • Norbert Weiner, “Newtonian and Bergsonian Time,” from <i>Cybernetics</i> (1948; 1961) 	<p>Twine Creative Project (parts 1 and 2): Interactive Storytelling - Building, Breaking, and Bridging (Due 26 Oct/9 Nov – 10 marks each: 20 marks total)</p>
<p>Week 7 17-19 October</p>	<p>The Digital Epoch 1960-2022 Computation and Writing: Merging Media through Digital Communication Technology</p> <p>New forms of communication technologies have profound effects on entire political ecosystems. When we begin using new technologies to communicate with each other, different social structures and distinctive cultural ideas typically emerge. Digital media has initiated an incredibly complex array of new ideas about society and culture that can easily be called “revolutionary.” This section will provide an important background to help us imagine what comes next.</p>	<p>In-class Discussion of Weiner and what he means by the change from Newtonian time to Bergsonian time. Who is Bergson anyway and why is he important?</p>
<p>Week 8 24-26 October</p>	<p>Hypertexts part I: Links and Networks as Strategic Narrative Tools As both a tool and a possible philosophy, Ted Nelson’s concept of the “Hypertext” in the 1960s immediately set up new parameters for how writing and reading practices change when produced electronically. The key device to transforming texts into hypertexts appears to be simply the capacity to link texts across a network.</p> <p>Readings:</p> <ul style="list-style-type: none"> • Ted Nelson, “There is too much to Say, and it Goes in All Directions,” from <i>Philosophy of Hypertext</i> (2002) 	<p>Twine Creative Project I due</p> <p>Special Media Assignment 2: Designing a Throbber – Asterix Painting in JS (Due 2 November – 5 marks)</p>
<p>Week 9 31-2 November</p>	<p>Hypertexts Part II: Caught in a Narrative Web Nelson’s ideas might have appeared too early when he first began to conceptualise hypertexts in the 1960s but over the course of the next two decades, we’ll see several important tools develop in universities and the private sector, eventually leading to Ted Berner-Lee’s release of HTTP visual interfaces in August 1991 he named “the World Wide Web.”</p> <p>Readings:</p> <ul style="list-style-type: none"> • Katherine Hayles, “Technotexts,” from <i>Writing Machines</i>, 2002. 	<p>In-class Discussion of Nelson</p> <p>Special Media Assignment 2 Due</p> <p>Twine Creative Project II Workshop (2 November)</p>

Week 10 7-9 November	Beyond the Hypertext: Paths to Better Writing Tools <p>Clearly, Hypertext has helped introduce an entire new paradigm of writing as an internetworked, learning or knowledge system. We'll discuss and experiment with some of the more important models to have emerged over the last 30 years.</p> <p>Reading: Scott Rettberg, "Interactive Fiction and other Game-like Forms" (2019)</p>	In-class Discussion of Hayles Twine Creative Project II due Special Media Assignment 3: Partnering up with AI – Electronic Story Book (Due 7 December – 5 marks)
Weeks 11 14-16 November	Gaming: Narratives and Networks as Writing Playgrounds <p>Gaming and digitally distributed networks enjoy a very close history. This section looks specifically at the cybertext as a gaming platform, exploring its technical and narratological evolution from adventure games to multimedia walk-throughs.</p> <p>Readings/Gaming:</p> <ul style="list-style-type: none"> • A. Reed, J.T. Murray, and A. Salter, selections from <i>Adventure Games: Playing the Outsider</i> (2020) • Serge Bouchardon, "Loss of Grasp" • Adam Cadre, "Photopia" (1998) • Porpentine, "With Those We Love, Alive" (2014) • Fullbright "Tacoma" (2018) 	In-class Discussion of Rettberg Investigative Study Report: Role Play Games (RPG) as Storytelling Devices (Due 30 November – 10 marks)
Week 12 21 November (Tuesday class)	Generative Artificial Intelligence and Large Language Models (2023-?) <p>Scientists and media theorists tend to agree that 2023 marks a significant point in cultural and social history when new media technologies are introduced with the potential to transform how individuals worldwide not just communicate but actually "think." Many compare the significance of GAI technologies to the transformative potential the printing press demonstrated when it made print editions suddenly available and increased literacy rates among general populations.</p> <p>From Print to Digital Literacy</p> <p>Generations in very recent past typically stressed how important high reading and writing literacy was to being successful in just about any career, whether it be trades or medicine, law, or astrophysics. You had to know how read and write to become professionals. What does it mean to be digitally literate?</p> <p>Readings:</p> <ul style="list-style-type: none"> • Annette Vee, "Sociomaterialities of Programming and Writing" from <i>Coding Literacy</i> (2017) 	Major Research Project: Digital Media in the Next Decade (Due 14 December – 20 marks)
Week 13 28-30 November	<p>When Tools become Authors: A New Literacy Emerges</p> <p>Fully into the 21st century, we've come to accept word processing and email tools to help us write our messages and prose. It corrects our syntax and even makes ongoing suggestions as to what content could come next. This week let's ask ourselves whether we think these advances in technology help us communicate our thoughts or possibly make us too dependent on algorithms for our tastes and views.</p> <p>Readings:</p> <ul style="list-style-type: none"> • Racter, <i>The Policeman's Beard is Half-constructed</i> 1984 • Bok, "The Piecemeal Bard Is Deconstructed: Notes Toward a Potential Robopoetics" • Openai Dall-EE • Discord Mid-Journey 	Investigative Study Reports Due
Week 14 5-7 December	<p>When Tools become Authors: A New Literacy Emerges</p> <p>Fully into the 21st century, we've come to accept word processing and email tools to help us write our messages and prose. It corrects our syntax and even makes ongoing suggestions as to what content could come next. This week let's ask ourselves whether we think these advances in technology help us communicate our thoughts or possibly make us too dependent on algorithms for our tastes and views.</p> <p>Readings:</p> <ul style="list-style-type: none"> • Racter, <i>The Policeman's Beard is Half-constructed</i> 1984 • Bok, "The Piecemeal Bard Is Deconstructed: Notes Toward a Potential Robopoetics" • Openai Dall-EE • Discord Mid-Journey 	Electronic Story Books due Major Research Project Workshop

Week 15
12 December

p(doom) or p(evolve)?

GAI software is more than just another set of media tools for organizing our narratives and storytelling in the digital era, they also are a means for organizing people and their social relations. This final section looks specifically at how social ecosystems have changed now that we communicate, write and link our texts across digital media networks with highly sophisticated AI capabilities. Have we made ourselves obsolete? How do you feel about our shared "digital media future" and the roll you will play in developing it?

- **Readings: Marshall McLuhan and Quentin Fore, selections from *The Medium is the Massage***

Presentations

Research Project due Reading Week (14 December)