COM 355 Digital Media Futures

Instructor: Dr. Andrew Klobucar

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Office Hours: TR 2:30-3:30pm;
W by appt.

Classroom: CKB 313

Term: Fall 2024 (F2024)

Course Format and Objectives

This class will meet on Tuesdays and Thursdays from 4:00 pm to 5:20 pm

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) and high-speed internet, as most of the work will be read via the 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: 3 September – 10 December 2024. This course provides three credits for a Humanities and Social Sciences 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: Course Overview

General Course Description

Digital Media Futures is a comprehensive third-year course that provides critical thinking and in-class workshop opportunities to explore new digital media technologies and how they may actively change the various cultures and even political economies we inhabit. The course follows a historical path based upon significant technological developments in different modes of media production, beginning in 1991 with the emergence of the web GUI interface and HTML. We will then formally set out on our explorative journey to investigate similar innovations that often set the stage for cultural transformations best described as "revolutionary." Our travels will emphasize important starting points in these histories, noting, for example, how HTML directly followed the earlier visionary ideas of Ted Nelson and his foundational concept of Hypertext.

As the course progresses, we will shift our focus toward the present moment and the future ones lying before us, beginning with recent developments in Generative AI (GenAI). Together, we will examine how GenAI easily signals the latest set of cultural changes via new media technologies due to its capacity to produce new tools for content creation, data analysis, and human-computer interaction. The course will also explore and speculate about the cultural possibilities that Extended Reality (XR), encompassing both Virtual Reality (VR) and Augmented Reality (AR), may soon stimulate. We will analyze how XR technologies create new realms of interactive experiences, reshaping a wide landscape of new industries ranging from gaming to healthcare and education. Our journey (for now) will conclude with a glimpse into the coming realm of immersive media and spatial computing, studying how creative thinkers and software engineers are currently leveraging digital tools to create multisensory experiences that may challenge anew what it means to live with, communicate and understand our world through our digital lenses. Throughout our journey, students will engage with critical readings, participate in discussions, and complete projects that aim to provide a thorough understanding of the complex epistemological, political, economic, and perhaps most importantly, ethical impacts of what it means to build our world and how we understand and communicate our ideas about it through ongoing advances in digital media.

Learning Objectives

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 and 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.

Assignment List

Assignment and Description	Course Value
Participation Active engagement in class discussions and activities	10 marks
Reading Response Forums Four Forums for In-class Discuss & Response will be set up based on assigned readings. Each Forum will be worth 5 marks	20 marks
Experiments in Media Assignments • **Creative Interactivity Using JavaScript** Coding exercise using JavaScript to create digital media art	5 marks
• **Data Self-Portrait** Creative project representing personal data visually	5 marks
• **AI Book Production** Collaborative project using AI tools to produce a digital book	5 marks
• **Investigative Study** In-depth research on a chosen topic related to digital media	10 marks
• **Twine Interactive Story** Creation of an interactive narrative using Twine software	20 marks
• **Final Research Project** Comprehensive research paper on a course-related topic	20 marks
• **Presentation** Oral presentation of research findings to the class	5 marks
Total Course Sum of all assignments	100 marks

Readings

1. Ted Nelson, “There is too much to Say, and it Goes in All Directions,” from *Philosophy of Hypertext* (2002).
2. W. Lance Bennett and Steven Livingston “A Brief History of the Disinformation Age Information Wars and the Decline of Institutional Authority” (2021).
3. Norbert Weiner, “Newtonian and Bergsonian Time,” from *Cybernetics* (1948; 1961).
4. Katherine Hayles**, “**Cyborgs, Monsters, or Both?”
5. Kevin Roose: “A Conversation With Bing’s Chatbot” *New York Times*, (Feb. 16, 2023; Updated Feb. 17, 2023)
6. Jeffrey Dastin “Insight - Amazon scraps secret AI recruiting tool that showed bias against women” (Oct. 10., 2018)
7. M. Beugnet and L. Hibberd, “Absorbed in experience: new perspectives on immersive media Introduction” (2021)

Punctuality, Participation, and Attendance

Our twice-weekly in-class sessions offer learners multiple opportunities to discuss and explore course-relevant topics through individual input and group debate. My teaching approach emphasizes student-led learning, and I encourage you to lead discussions as often as possible. Feel free to introduce material and ideas you believe are relevant to the topic at hand. Independent student-led seminars can be scheduled ad hoc in class by any learner or learner group. Total Attendance is expected for every class.

Absences due to illness must be confirmed by email at least **4 hours** before class to avoid penalty. In-class activities and general participation account for **10 marks** based on the frequency, relevance, and quality of your comments, questions, and observations. More than six **unexcused absences = 3 weeks or 20 percent of the entire curriculum)** will result in automatic course failure. Excessive unexcused lateness of 20 minutes or more throughout the course will be considered one absence. Students expecting to miss classes or exams due to religious observance or athletic events must submit a written list of dates to be missed by the end of the second week of classes. Students are expected to make up all missed work for a full assessment.

- **If you cannot attend class for any reason other than physical illness, notify me at least one day before the scheduled class to allow me to prepare alternative access to the material.**
- **Requests for extra time on individual assignments must be submitted in writing (individual emails are fine) at least one week (7 days) before the due date.**
- **For timely assistance, please schedule reviews of assignment drafts or requests for assignment-specific advice at least nine days before the due date**

While alternative submission options for late assignments and extra course material will be provided for each graded task, late assignments and missed classes outside these guidelines will incur penalties. Late assignments will lose 10% of the task's course value up to 1 week after submission, 20% from 8 days to 2 weeks after the due date, and 50% from 15 days to 4 weeks after the due date. Assignments that are more than four weeks late will not be accepted. Late assignments will not receive supplementary commentary beyond their graded evaluation. Following proper communication guidelines helps minimize grading penalties and ensures you receive critical feedback. Compromising your access to resources, including time needed for assignments, can seriously hinder your ability to learn the skills and approaches required for understanding

the course material. This remains a significant risk throughout the term. Informing me early about any challenges you face will allow me to work with you more effectively and prevent the coursework from overwhelming you. Losing access to course material and instructor assistance significantly increases the risk of withdrawal or failing the course.

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Success in this course requires consistent access to and proper use of electronic resources. You are responsible for maintaining this access as a student, as we assume these resources are available 24/7. If you encounter technical problems with the software or any specific interface during the course, promptly contact me or one of the IT/Help resources associated with the website.

Assignment Submission

All essays and papers are due in lecture on the dates listed in the schedule.

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 an 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.

Grading Profile

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

Course Syllabus and Schedule

The following is the current 15-week schedule for COM 355 Digital Media Futures. Please note that this schedule is subject to change depending on how well the course and classwork proceed.

Week	Topics/Readings	Assignments
Week 1 **3 – 5 September**	**Introduction to Digital Media** • **Overview of course objectives and expectations.** • **Historical context: The emergence of the web with a GUI interface and standard formatting HTML** The first week presents us with a clear and rare opportunity to simply talk about ourselves and express any interests we might have about media and how to design it well using more complex tools. We'll chat openly about what we do and who we are and what we want to learn most this term in the course.	**Read the syllabus I hand out on Tuesday and have a few comments or questions ready for Thursday's class.**
Week 2 **10 –12 September**	**The Digital Epoch** **1960-2022** **Computation and Writing: Merging Media through Digital Communication Technology** **The Birth of Hypertext** • Ted Nelson and the concept of Hypertext • Early visions of digital media and Information Organization	**Readings:** • Ted Nelson, "There is too much to Say, and it Goes in All Directions," from *Philosophy of Hypertext* (2002) In-class Discussion and Participation
Week 3 **17–19 September**	**The Digital Revolution: The Development of Digital Information Organization** • Key milestones in digital media development and its Impact on society and culture • The rise of the web and user-generated content • Social networking platforms and their influence	• **Reading Response Forum 1** W. Lance Bennett and Steven Livingston "A Brief History of the Disinformation Age Information Wars and the Decline of Institutional Authority" (2021) • In-class Introduction to building an HTML page.
Week 4 **24–26 September**	**Digital Creativity: Interactivity and Digital Storytelling** • Mobile apps and their impact on digital media consumption • Introduction to Interactive Fiction and digital writing tools	**Special Media Assignment 1: Playing with JS animation** **(Due week 6: 5 marks)** **Twine Creative Project (parts 1 and 2): Interactive Storytelling - Building, Breaking, and Bridging** **(Due 26 Oct/9 Nov – 10 marks each: 20 marks total)**
Week 5 **1–3 October**	**Twine Workshop: Working with Interactive Digital Tools** • Non-linear narrative planning and incorporating advanced multimodal tools	**Advance in-class workshop on Twine for Creative Projects**

Week 6 **8–10 October**	**Pre-Digital Modes of Thinking: The Atomic Epoch 1920-1960** **Science "Explodes:" Science, Media and the New Principle of Uncertainty** 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.	• **Reading Response Forum 2: (5 marks)** **Read:** Norbert Weiner, "Newtonian and Bergsonian Time," from *Cybernetics* (1948; 1961) **Media Special Assignment 1 Due**
Week 7 **15–17 October**	**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 how we actually understand how we interactively mediate our realities **Openness and Innovation: How Real is Reality?**	**Media Special Assignment 2: Data Self-Portrait (Due week 9 – 5 marks)**
Week 8 **22– 24 October**	**The Post Digital Epoch (2023-???)** **Introduction to Generative AI** • Basics of artificial intelligence and machine learning • Early applications of GenAI in digital media • Gaming: Reading as Play **Generative AI as Content Creation** • Text generation and Natural Language Processing • Amazon as a Case Study "Party Rock"	**Reader Response Forum 3:** **Read:** Katherine Hayles, "Cyborgs, Monsters, or Both?" **Readings**: • **Serge Bouchardon, "Loss of Grasp"** • **Adam Cadre, "Photopia" (1998)** • **Fullbright "Tacoma" (2018)**
Week 9 **29 – 31 October**	**Ethics and Societal Impacts of GenAI** • Ethical considerations in AI-generated content • Potential societal impacts of widespread GenAI adoption	**Media Special Assignment 2 Due** **Investigative Study Report: Role Play Games (RPG) as Storytelling Devices (Due 30 November – 10 marks)**

Week 10 **5 – 7 November**	**Introduction to Extended Reality or "XR"** • Definitions and distinctions: VR, AR, and Mixed Reality • Historical development of XR technologies	**Reader Response Forum 4: Love and Hallucination** **Read:** Kevin Roose: "A Conversation With Bing's Chatbot" **Special Media Assignment 3- Partnering up with AI – Electronic Story Book (Due 7 December – 5 marks)** **Readings:** "Jeffrey Dastin "Insight - Amazon scraps secret AI recruiting tool that showed bias against women" (Oct. 10., 2018)
Week 11 **12 –14 November**	**Applications of VR and AR** • Case studies in gaming, healthcare, and education • Hands-on experience with VR/AR applications **The Future of XR** • Emerging trends in XR technology • Potential impacts on various industries	**Major Research Project: Digital Media in the Next Decade (Due 12 December – 20 marks)**
Week 12 **19 –21 November**		**XR LAB Play (Full class)**
Week 13 **26 November** **Thanksgiving**	**Immersive Art and Digital Media** **Introduction to Immersive Interface and Spatial Computing**	**Immersive Art Exhibit (off-campus)**
Week 14 **3 – 5 December**	• Case studies of immersive art installations the Convergence of GenAI and XR. • Potential synergies between AI and XR technologies • Speculative future applications	**Reader Response Forum 5:** **Read: M. Beugnet and L. Hibberd, "**Absorbed in experience: new perspectives on immersive media Introduction**"** (2021) **Live Presentation Sign-ups**
Week 15 **10 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? • Student presentations on future digital media trends • Reflection on course themes and looking ahead	**Course Wrap-up and Final Presentations** **Final Live Presentation Sign-ups**