DSM 520: Managing Technologies for Digital Media
(4.0 Units)

Fall 2022 – Wednesdays – 6.30-9.20pm
Section: (21868R)
Location: ASC 228

Instructor: Dr. Morten Bay
Office Hours: By appointment via Zoom (see links below)

Contact Info:
E-mail: mortench@usc.edu
Office hours sign-up: https://bay-usc.youcanbook.me
Zoom: https://usc.zoom.us/my/mortenbay
Twitter: @mortenbay
LinkedIn: https://www.linkedin.com/in/mortenbay

Course Description
Digital and social media platforms play an increasing role in corporate and other organizational settings. This course prepares students for a professional work life in digital and social media industries and organizations by analyzing and assessing the fundamental principles and mechanisms that apply to the technologies that create these environments. This course aims to provide students in the Digital Social Media (DSM) program with the skills to keep themselves current with new computational technologies that may emerge after they leave USC. This happens through a strong focus on developing analytical skills that enable students to break down any digital media technology to understand its overall principles of functionality, how to communicate about the technology with those who know more (or less) about it, and its practical and ethical implications for the world.

Student Learning Outcomes
After completing this course, students will be able to:
♦ Provide an overview of the technologies and principles that underpin the digital media industry
♦ Explain the core principles of functionality in digital media technologies, from the smallest components to the largest implementations
♦ Analyze the functions and affordances of components in any given digital media technology
♦ Explain how digital media technologies influence society’s power distributions, economic, industrial, and business practices
♦ Analyze and evaluate social, ethical, and DEIA challenges presented by digital media technologies as well as apply the appropriate policies that mitigate/regulate these challenges
♦ Demonstrate a high level of general technological proficiency in engagements with area-specific experts and other digital media technology professionals.
♦ Apply the appropriate communication skills to satisfactorily convey information about complex technological topics.
Course Notes
Instructor slide decks will be made available the day after the session.

Policies and Procedures

A respectful learning environment
This class consists of students with diverse identities from a very wide range of backgrounds and cultures. Intellectual freedom is a priority in class discussions, but any form of sexism, racism, xenophobia, homophobia, ableism or other forms of discriminatory behavior on the basis of gender, ethnicity, sexual orientation, ability or class will not be tolerated. Incidents will be reported to the university immediately.

Should you be triggered, offended or hurt by anything said in the classroom or require any form of trigger warnings, speak up. If you are not comfortable speaking up in class, contact the instructor privately to remedy the situation.

The above naturally also applies to things said by your instructor, who is a human being, always learning, and can make mistakes. Do not be afraid to call your instructor out in class sessions on these grounds. If done in a respectful manner, this will not diminish your standing in class, but will improve it.

Please see below for instructions on how to contact the Office of Equity and Diversity, the Title IX Office, The Office of Disability Services and Programs and how to report incidents of harassment and/or bias.

Pronouns and names
You have an absolute right to demand that your chosen pronouns are respected. Since it is still not standard to list preferred pronouns on university rosters, please enable your instructor to respect any specific pronoun choices by submitting this information via email before classes start or as early as possible after that. Your instructor’s pronouns are He/him/his.

If your preferred name does not match the name in the university’s registration system, please inform your instructor in a similar manner.

Faith/Belief-based accommodations
Please inform your instructor as early as possible if the suggested schedule in this syllabus conflicts with your faith or belief system so accommodations can be made.

Honoring Native Lands
By participating in this course, you implicitly accept the land acknowledgment below. If you are not comfortable with this for any reason, please notify your instructor as quickly as possible.

This course acknowledges the Gabriélino-Tongva peoples as the traditional land caretakers of Tovaangar (the Los Angeles basin and So. Channel Islands), and pays respect to the Honuukvetam (Ancestors), ‘Ahiihirom (Elders) and ‘Eyoohiinkem (our relatives/relations) past, present and emerging. Along with the Tongva, we also recognize the Chumash, Tataviam, Serrano, Cahuilla, Juaneno, and Luiseno People,
for the land that USC also occupies around Southern California. The course is taught in respectful consideration of the many legacies of violence, displacement, migration, and settlement that preceded its establishment as an opportunity for students.

Communication
Feel free to email me anytime with any concerns or questions. Please allow for 24 hours response time on weekdays, 48 hours on weekends. Due to ongoing research work, I am more inundated with emails than usual. If you have NOT heard back from me within 48 hours of sending your email, it may have been caught by an overzealous spam filter or drowned in a sudden wave of unrelated email, and you should follow up with me. Also, feel free to use any DM mechanism on the social media accounts mentioned above, however I make no guarantees for response time on those.

Required Readings and Supplementary Materials
There is no textbook in this course. All readings and other instructional material that must be read, watched, or listened to will be available on Blackboard.

Description and Assessment of Assignments

Weekly Pre-class Assignments:
Note that the readings for every week contain more material and insights than we have time to cover in class. For this reason, your comprehension of the reading materials will be tested in weekly assignments that count towards your final grade. Most weeks, these will be in the form of quizzes that can be found on Blackboard in the relevant week’s folder. In some weeks the weekly assignment will be an exercise that you are required to report back with some form of deliverable, or an interactive assignment you complete in Blackboard or a third-party app/site.

Regarding the quizzes:
You will NOT be able to retake the quiz if you respond incorrectly to the question. If you can demonstrate that you had technical issues with the quiz module, or if you missed any quizzes and have acceptable reasons, you will be allowed to retake any remaining quizzes at the end of the semester.

The Weekly Pre-class Assignments are due at the time class starts on Wednesdays, 6.30pm.

Weekly Post-class Assignments
In addition, you will be required to write a discussion post to be posted on Blackboard that is a minimum of 200 words and a maximum of 500 words in length after each class. These discussion posts take up 15% of your overall grade and are required.

In the discussion posts, you must reflect on that week’s class, the discussions of the readings and the topics of the week and what your own perspective is on all of it. The discussion posts will be due the evening before the following week’s class, i.e., the discussion post reflecting on Week 3’s Wednesday class will be due Tuesday in Week 4 at 11:59pm.

Tip: If you want to pursue a few extra points for participation, leave respectful, thoughtful and interesting responses to your fellow students’ discussion posts. It is perfectly all right to disagree as long as you show the proper respect for the person you are responding to and argue your case with substance.
Participation
Part of your grade will be determined by your participation in the sessions, in-person or (as an exception) online, synchronous or asynchronous. If you want to get a good participation grade, you should be attentive and engage with the class discussion, whether online or in-person. Your level of engagement in these activities will weigh heavily when determining your participation grade.

Midterm and Final papers:
The two papers in the class will be roughly the same in terms of what they require of you. In both papers, you will be required to choose one of the technologies we have discussed previously in class and write a paper that both explains it in detail, but also responds to a question about the technology provided by your instructor.

A few weeks into the course, you will be given a prompt that details the requirements and structure of the Midterm paper and other instructions, including a (very) brief study guide. In this document, you will also find a list of technologies we have discussed in class for you to choose from, as well as the question you must address in the paper. A similar document will be given to you a minimum of two weeks before the Final paper is due.

Whereas your Midterm paper only covers subjects we have discussed up to the due date (Wednesday in Week 9), the Final paper is expected to cover the whole course and is required to be longer. You will still only discuss one technology, but it may be from any week in the semester. When responding to the assigned question, you must thus also consider any relevant perspectives that might have come up during discussions of topics from early on in the course. Hence, it is a good idea to take comprehensive notes from the very beginning. The Final paper is due December 7 at 11:59pm.

Note: ALL writing assignments in this class must follow APA formatting guidelines.

Breakdown of Grade

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Pre-class Assignments</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Weekly Post-class Assignments</td>
<td>15</td>
<td></td>
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<tr>
<td>Midterm paper (Due 10/19)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Final paper (Due 12/7)</td>
<td>30</td>
<td></td>
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<tr>
<td>Participation</td>
<td>15</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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Grading Scale
Note: This is the standard grading scale suggested by USC Annenberg. However, the actual, final grading scale for the course is created at the discretion of the instructor and for this course, it will be calculated based on the performance of the entire class and with consideration of external conditions and circumstances emerging during the semester.

94 to 100%: A  80% to 83%: B-  67% to 69%: D+
<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>Excellent; demonstrates extraordinarily high achievement; comprehensive knowledge and understanding of subject matter; all expectations met and exceeded.</td>
</tr>
<tr>
<td>B</td>
<td>Good; moderately broad knowledge and understanding of subject matter; explicitly or implicitly demonstrates good, if not thorough understanding; only minor substantive shortcomings.</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory/Fair; reasonable knowledge and understanding of subject matter; most expectations are met; despite any shortcomings, demonstrates basic level of understanding.</td>
</tr>
<tr>
<td>D</td>
<td>Marginal; minimal knowledge and understanding of subject matter; more than one significant shortcoming; deficiencies indicate only the most rudimentary level of understanding.</td>
</tr>
<tr>
<td>F</td>
<td>Failing; unacceptably low level of knowledge and understanding of subject matter; deficiencies indicate lack of understanding.</td>
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### Grading Timeline

For effective learning, students should receive timely feedback on assignments and exams. Therefore, every attempt will be made to grade assignments/exams and post grades within two weeks. If you think a score or a grade is missing or inaccurate, you are responsible for notifying the Instructor via email within one (1) week of a score posting. The email must include a compelling reason/argument for why you believe your score or grade is inaccurate. Do NOT sign up for office hours to discuss your grade before having completed this step. After reviewing your email, any further action is at the discretion of the instructor. Moreover, you only have this period of time to contest a score on an assignment/exam. If you fail to inquire/notify us of any discrepancy, missing score, or contest a score within one week of the date the score is posted, no further changes will be made.

### Assignment Submission Policy

All submissions are due at 11:59pm on the due date (unless otherwise stated) and must be submitted through Blackboard/TurnItIn in .DOC or .PDF format.

### Add/Drop Dates for Session 001 (15 weeks: 8/22/22 – 12/2/22)

**Link:** [https://classes.usc.edu/term-20223/calendar/](https://classes.usc.edu/term-20223/calendar/)

- **Friday, September 9:** Last day to register and add classes for Session 001
- **Friday, September 9:** Last day to drop a class without a mark of “W,” except for Monday-only classes, and receive a refund for Session 001
- **Friday, September 9:** Last day to change enrollment option to audit for Session 001
- **Friday, September 9:** Last day to change a Pass/No Pass to a letter grade for Session 001
**Friday, September 9:** Last day to purchase or waive tuition refund insurance for fall  
**Tuesday, September 13:** Last day to add or drop a Monday-only class without a mark of “W” and receive a refund or change to Pass/No Pass or Audit for Session 001  
**Friday, October 7:** Last day to drop a course without a mark of “W” on the transcript for Session 001. Mark of “W” will still appear on student record and STARS report and tuition charges still apply. [Please drop any course by the end of week three (or the 20 percent mark of the session) to avoid tuition charges.]  
**Friday, November 11:** Last day to drop a class with a mark of “W” for Session 001

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**Course Schedule: A Weekly Breakdown**

**Important note to students:** Be advised that this syllabus is subject to change - and probably will change - based on the progress of the class, events, and/or guest speaker availability. Students should consult the University Registration Calendar for dates associated with add/drop deadlines, fees, and grading options.

**Note on readings:** The readings are mandatory. I will cold-call students in class, and I do take note when it is clear that the student hasn’t done the readings, and this will significantly lower the student’s participation grade. Similarly for papers: If a student does not make use of the class readings when discussing a relevant topic, this will be regarded as if the student hasn’t done the reading work, and this will also severely decrease the score for the paper. In other words, if you want to succeed in this course: READ THE REQUIRED MATERIALS BEFORE CLASS!

You will be instructed on how to read scientific and academic papers strategically in the beginning of the course, helping you to save time and make the studying process easier.

Please note that the readings in this class are a mix of academic readings and journalistic, easy-to-read articles and book chapters. If it looks like there are a lot of pages to read in preparation for a class session, please know that these are much easier to read than academic articles and shouldn’t take you very long to get through. The reading amount for each week is designed to be the equivalent of 40-60 academic pages, which is typical for a graduate-level course.

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<table>
<thead>
<tr>
<th>Week</th>
<th>Topics/Daily Activities</th>
<th>Readings/Homework</th>
<th>Deliverable/Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/24</td>
<td><strong>FOUNDATIONS</strong></td>
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</tbody>
</table>
|      | Intro to the class and thinking about technology: What does "digital" and "media" actually mean? | Ruben: How to Read an a Scientific Paper  
[https://www.science.org/content/article/how-read-scientific-paper-rev2](https://www.science.org/content/article/how-read-scientific-paper-rev2) (Note: Sarcasm and Irony may be present in this reading)  
George Mason U Writing Center: Strategies for Reading Academic Articles  
[https://writingcenter.gmu.edu/writing-resources/reading-practices/strategies-for-reading-academic-articles](https://writingcenter.gmu.edu/writing-resources/reading-practices/strategies-for-reading-academic-articles)  
Harold Washington College Library: How to Read Scholarly Articles: Strategies for Reading  
[https://researchguides.ccc.edu/c.php?g=516083&p=3571315](https://researchguides.ccc.edu/c.php?g=516083&p=3571315)  
Pötzsch, H. (2021). Bringing materiality into thinking about digital literacy: Theories and practices of critical education in |                      |
|      |                        |                   |                      |
| Week 2 8/31 | How computers work: A journey through the Von Neumann architecture | Video: The Von Neumann Architecture [https://youtu.be/MI3-kVYLr8](https://youtu.be/MI3-kVYLr8)  
|---|---|---|
| Week 3 9/7 | **HARDWARE**  
Bits and atoms: The materiality of data and computing devices | Video: Binary and Data: [https://youtu.be/USBCmwmMCDA](https://youtu.be/USBCmwmMCDA)  
Borning, A. et al. (2020). The 'invisible' materiality of information technology. *Communications of the ACM, 63*(6), 57-64. |
| Week 4 9/14 | Screens: How bits become pixels and pixels become new realities | Video: Bitmap Images - [https://www.youtube.com/watch?v=OKmimFoaITI](https://www.youtube.com/watch?v=OKmimFoaITI)  
Paez, D. (2020): *How a beloved video game style was spawned out of necessity*. Inverse. |
| Week 5 9/21 | Manufacturing digital media technology: The global ecosystem of designers, manufacturers, and marketers | Video: Petrova, M. (2018) *We traced what it takes to make an iPhone, from its initial design to the components and raw materials needed to make it a reality*. CNBC.com  
| Week 6 Dates: 9/28 | **SOFTWARE**  
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Resources</th>
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| Week 8 | 10/12 | Gaming: The greatest engine of digital media technology innovation? | Video: The Virtual Production of The Mandalorian Season One [https://youtu.be/gUnxzVOs3rk](https://youtu.be/gUnxzVOs3rk)  
Please read: Console, Game Development; Game Engine, Game as a Medium, Mechanics, Platform |
|        |        |        | [Fall Recess: Thursday, October 13 and Friday, October 14] |
| Week 9 | 10/19 | NETWORKS  
The Internet I: From colonial telegraph cables to postcolonial fiber | Video: Andrew Blum: What is the Internet, really? [https://youtu.be/XE_FPEFpHt4](https://youtu.be/XE_FPEFpHt4)  
|        |        |        | Midterm paper due |
| Week 10 | 10/26 | The Internet II: Protocols, packets, pipes and politics | Video: The Internet - IP Addresses & DNS [https://youtu.be/So8CwafCxnU](https://youtu.be/So8CwafCxnU)  
Video: The Internet - Packets, Routing and Reliability [https://youtu.be/AYdf7b3nMto](https://youtu.be/AYdf7b3nMto)  
Video: The Internet - HTTP and HTML: [https://youtu.be/kBXQZMmiA4s](https://youtu.be/kBXQZMmiA4s)  
Bay, M. (2022) ARPANET. *Encyclopedia of Journalism*. SAGE.  
|---|---|---|---|
| Week 12 | 11/9 | APPLICATION LAYER
| Week 13 | 11/16 | Streaming: Storing is boring, but sharing is caring, and life is live | Video: How OTT streaming works https://youtu.be/ocKnx9O2ybs
| Week 14 | Dates: 11/21-11/25 | NO CLASS | [Thanksgiving Recess:
Wednesday, November 23 to Sunday, November 27] |
<p>| STUDY DAYS | | | |</p>
<table>
<thead>
<tr>
<th>Dates:</th>
<th>12/3-12/6</th>
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<th>Final paper due December 7!</th>
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<tr>
<td>FINAL EXAM PERIOD</td>
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<tr>
<td>Dates:</td>
<td>12/7-12/14</td>
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Statement on Academic Conduct and Support Systems

a. Academic Conduct

*Plagiarism*

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards.” Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

The School of Communication maintains a commitment to the highest standards of ethical conduct and academic excellence. Any student found responsible for plagiarism, fabrication, cheating on examinations, or purchasing papers or other assignments will be reported to the Office of Student Judicial Affairs and Community Standards and may be dismissed from the School of Communication. There are no exceptions to the school’s policy.

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course, without approval of the instructor.

b. Support Systems

*Counseling and Mental Health* - (213) 740-9355 – 24/7 on call [studenthealth.usc.edu/counseling](http://studenthealth.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline* - 1 (800) 273-8255 – 24/7 on call [suicidepreventionlifeline.org](http://suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention and Services (RSVP)* - (213) 740-9355(WELL), press “0” after hours – 24/7 on call [studenthealth.usc.edu/sexual-assault](http://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office of Equity and Diversity (OED)*- (213) 740-5086 | *Title IX* – (213) 821-8298 [equity.usc.edu](http://equity.usc.edu), [titleix.usc.edu](http://titleix.usc.edu)

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following *protected characteristics*: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university
also prohibits sexual assault, non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298
usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776
dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710
uscsa.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101
diversity.usc.edu
Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu
Non-emergency assistance or information.

Annenberg Student Success Fund
https://annenberg.usc.edu/current-students/resources/annenberg-scholarships-and-awards
The Annenberg Student Success Fund is a donor-funded financial aid account available to USC Annenberg undergraduate and graduate students for non-tuition expenses related to extra- and co-curricular programs and opportunities.