Syllabus

93.830: Disruptive Technologies in Arts Enterprises

Spring 2021, 6 units

Meeting time/location: Monday's, 6:30 – 7:50; HbH 1204

Instructor: Dr. Brett Ashley Crawford

Contact info: brett@cmu.edu, 301.802.6016 (c)

Office Hours: Tuesdays and Fridays 12 - 2:00p; Wednesdays 8 - 10:00am; Sundays when needed

Office Hours Scheduler: https://calendly.com/cmu-dr-brett

Office Hours Link: https://cmu.zoom.us/j/375620710?pwd=Q3BkOWp4bEFsYVB6VFM2OGk2cW12QT09

Course Description

The world is undergoing monumental change. Much of this is fueled by the aftermath of the introduction of the World Wide Web in the mid-1990s and the entry of the personal computer to the mass marketplace. These actions opened up opportunities for computing and creativity using modern technology akin to the industrial revolution. Richard Florida identified and coined the term *creative economy*. Some have also coined this time as the second renaissance noting that this era is changing our core frameworks for civilization. As in the age of the renaissance, creativity and the arts are often at the cutting edge for creating and incorporating technologies in the world even though some nonprofit institutions seem slow to adapt.

This seminar course provides students with multiple perspectives on how emerging technologies are disrupting arts enterprises, including **arts-making**, **audience engagement**, and **arts management**. From the Internet of Things to Virtual Reality, students will investigate what is happening in the field and what's on the fringe and about to break into the marketplace. Through readings/viewings, hands-on activities, and individualized research the course provides a breadth of understanding of multiple technologies for students overall. Additionally, each individual student leaves the class with a deeper expertise in at least one or two technologies of their choice.

The material submitted for assignments *may be recommended* to be included in the content created for AMT Lab (www.amt-lab.org) Readers for the platform are arts management professionals working in the field. Approximately 6000 individuals from around the world read the content monthly. If recommended for AMT Lab, the content is passed on to the Chief Editor of Research or the Podcast Producer who will work with you directly.

Course Objectives:

In the process of taking this course, you will	**Assessed by**
learn techniques for research at the graduate/pre-professional level	Homeworks, Review /Analysis, Rabbit Holes
Explore transmedia as a method for sharing your ideas	Review /Analysis, Rabbit Holes
Uncover resources for learning about emerging technology	Weekly News
Get hands-on experience with several emergent forms of technology	Review /Analysis, Rabbit Holes/Experiments
Understand *how* emerging modes of technology are changing all aspects of the arts enterprise.	Homeworks, Rabbit Holes, Class Discussion
Identify the current and future opportunities for technology in the arts making and management spaces	Homeworks, Rabbit Holes, Class Discussion

Gain perspectives of the intended and unintended consequences of the introduction of technologies to the arts making and arts management practice	Homeworks, Class Discussion
Learn to create qualitative and quantitative evaluation of software and hardware	Review / Analysis
Understand the core terminology and infrastructure of individual, institutional and marketplace technology solutions	Homeworks, Class Discussion

Course Tools:

- **Shared Google Drive / G chat**
- **Course website and blog:**
- **Canvas: https://canvas.cmu.edu**

Useful Tools:

- **Grammarly: https://www.grammarly.com/**
- **Hemingway App https://www.hemingwayapp.com/**
- **Zotero: https://www.zotero.com**
- **Descript (podcasting tool) Descript.com or Audacity**
- **Software available (regular or through virtual andrew):**
  https://www.cmu.edu/computing/software/
  https://www.cmu.edu/computing/services/endpoint/software/virtual-andrew.html

Course Materials:

- Google Glasses or VR Headset
- *Tools and Weapons*, Brad Smith (available via the Library reserves provided)
- *Creativity Code,* (Available via Library reserves)
- Podcasts, Videos and research studies from leaders in the field.
- AP and Chicago Style guides
- Blogs (for use for In the Weekly News)
  - NYTimes Technology
  - WSJ Technology
  - Nonprofit Technology Network
  - Mashable
  - Techcrunch
  - Beth Kanter Nonprofit Tech Blog
  - Arstechnica
  - Idealware
  - Nonprofit Tech For Good
  - https://www.museumnext.com/
  - Center for the Future of Museums

Useful references:

- Strunk and White's *Elements of Style*

PROFESSIONAL CONFERENCES:

- Engage in the world of the arts as you can online and in person (as it is safe)
- Engage at CMU in arts-tech locations via web-based opportunities (IdeATe, Create Lab and Frank Ratchye Studio for Creative Inquiry, Entertainment Technology Center sharings, CFA projects)
- You can also attend professional conferences on the topic: Museums and the Web (April) and Nonprofit Technology Conference (March) and others.

Course Requirements

Engagement

As a seminar, active in-class contributions are expected. At the graduate level, attendance is assumed, except in extraordinary circumstances. Should such circumstances arise (hospitalization, earthquake, etc.), please make every effort to let me know before class begins. *One absence is assumed* but recognize that your presence is important for our intellectual growth as a class as a whole.

Active class participation is expected. The class will offer opportunities to learn in an active and synergistic manner. Class time will include discussion of preparation materials, in-class projects, platform critiques, oral presentations and sharing of thoughts and ideas.

Due to the depth of the content and the limited in-class time together, this course utilizes various technologies: Canvas, Google, and a course Wordpress site. You are strongly encouraged to use Zotero as a means to track your research sources.

- *Canvas* will serve as a conduit to the course website, it relays deadlines (as does a google calendar), and it is a place where you submit your work.
- *Google Drive* contains course materials and will be a location where we offer collaborative opportunities
- *Slack* offers places for us to communicate quickly for questions/weekly news/ cool ideas. Login with your CMU ID and I encourage downloading the app :-) [we will also discuss options like Piazza or Discord]

Course deliverables

- **Cool news about your industry and the topic at hand that week (arts/entertainment/management/technology)**
    - Details: What is emerging in tech news? Or industry news? Technology opportunities are evolving faster than any one person can track. As a group, we can keep up to date with the field together. Thus, each week you will find an article about technology and arts management as related to our module space or better yet -- that week's material.
        - Post what you found to our weekly News Chat.
            - Include a 2-3 sentence "remark" in the clipping that explains what you found interesting in the article and how it is disrupting our arts ecosystem. The news piece may be regarding arts, arts management **or related** technology (for example – an article on RFID upgrades might not scream arts but it has use-value for the arts, e.g. Disney wristbands) AND where the technology affects the enterprise (program, internal, external, infrastructure)
            - Include a link to the source.
            - It is a pass/fail assignment (1 point each). 10 points = 100% Extra Credit over 10

- **Class curation**
    - You will sign up for a Class Curation week. You will be co- leading the discussion on that week's content. To do that, you will post 3 takeaways and one discussion question and no more than 2 interesting links you find about the topic to Slack. Post is due by **Sunday at midnight EST**. Completing the assignment with all the above parts = 100%. Peers can up vote their favorite to help direct conversation. Post will be in our discussion space (slack or discord)
- **Hands On Play Time***
    - 4 Hands-on experiments will be completed, documented (like a lab report) and shared out. These can be done solo or in pairs (depending on the experiment and your personal living situation although collaboration is fine if you want to work in pairs digitally)
        - Engage in a VR arts performance or AR art show. What was it like? What worked? What didn't? Now, try making your own VR/AR/MR/XR -- (single no longer than 2 minutes of XR). Tools/Demos on Web site
        - AI: engage with a chat bot on Facebook or on a website. When is it real and when is it a bot? How can you tell? Now try creating a chat bot or web scraping or create small robot. Tools/Demos on Website
        - Coding is actually just a logic problem. Try some coding -- any type. Some ideas and demos are on the class website.
        - Your choice (individualized experiment -- what do you want to try? 3-D Printing (skylab.ideate.cmu.edu), web scraping? You pick! - can do workshops too https://resources.ideate.cmu.edu/)
    - You will do a 2 - 5 minute share of your experiment to a subset of your peers who will give you feedback on a Google doc.

- **Review of App, Software, or Experience Analysis** (peer evaluation included)
    - Each person will select an App, Software, Report, or Digital Arts Experience to analyze or review. Your selection should be driven by your interests and career plans. For example, if you are researching AR for your research project, analyzing an AR experience in a local museum would be perfect. If your career plan involves databases, then reviewing an app interface of a database for fundraisers would be of value. Options include:
        - Analyze an arts experience that contained a digital component (Carnegie Science Center, Warhol Museum and the Carnegie Museums next door typically have interactives running and are open to the public) or a fully digital experience.
        - Product Reviews (arts/entertainment/management software or apps)*
    - Written Review / Analysis. The length should be 800+ words plus 2 – 3 visuals (pictures, video snippets, graphs, tables, figures – whatever). Samples are: https://amt-lab.org/reviews/2020/7/libby-vs-hoopla-reader-app-compairson or https://amt-lab.org/reviews/2019/12/streamlining-the-film-production-process-with-studiobinder-combining-pre-production-management-tools or https://amt-lab.org/reviews
        - This assignment can be part of your research project
    - OR pairs will create a podcast recording that discusses your reviews. Time 15-20 minutes. Podcast instructions and tools (audio outline) provided. A real life sample is: https://twit.tv/shows/hands-on-tech

- **ALL individuals** will submit an ANNOTATED bibliography that gave them context for their review (6 - 10 items, Chicago Style for MAM / APA for MEIM either for others. https://owl.purdue.edu/owl/general_writing/common_writing_assignments/annotated_bibliographies/index.html or https://www.scribbr.com/chicago-style/annotated-bibliography/)

- **Rabbit Hole Projects (2 different topics, enjoy the rabbit hole)**
  - Your focus for your projects will be a topic relevant to the industry, complex enough to be worthy of deeper research. Weekly news can serve as a resource for ideas, but final topics should be reviewed with the instructor. In the process of research and writing you will experiment in class with ways to share your findings that are not academic or solely text-based. Data-informed, digital storytelling skills should be gained and knowledge shared that serves as a catalyst to the field. Students will be introduced to multi-media and interactive tools as methods to enhance communicating the findings in their rabbit holes.

  - The cumulation of your research will include
    - 1) a sharing with your classmates that explains **what** the technology is, how it **works**, who is using it and how it is **disrupting** the arts enterprise field. You will get peer feedback from them via a shared google doc.
    - 2) you will create a final report that will effectively answer a research question that would be relevant for a professional in the field. It should include digital storytelling techniques (graphs, images, etc.) to convey the concepts and reach a length of anywhere from 2000 – 3000 words. You should attach a complete bibliography which is typically 2-4 pp or more pages in length.
  - Rubric will be reviewed in class and available in Canvas
  - ***How do I pick my rabbit topic and question?*** Using course topics or inspiration from Cool Weekly News, you will work with the instructor to refine research topic and questions over the first ½ of the term.
  - Samples:
    - https://amt-lab.org/blog/2020/8/the-environment-surrounding-facial-recognition-do-the-benefits-outweigh-security-risks?rq=dimick
    - https://amt-lab.org/blog/2020/12/streaming-trends-performing-arts
    - https://amt-lab.org/blog/2020/5/why-more-arts-organizations-need-privacy-policies?rq=lutie
    - https://amt-lab.org/reviews/2020/3/lets-get-digital-visualizing-movement-in-danc?rq=Christi

Extra Credit (5pts): WOYP / WYFT Post (see example https://amt-lab.org/reviews/2020/10/woyp-colin-post-artists-vr)

Grading Scale (100 Points):

Weekly News	20
Class Curation	15
Review/Podcast	15
Experiments	20
Rabbit Holes	30

Late work: All work has a 48-hour grace period recognizing that conflicts happen. The 48-hour grace period can be extended IF you ***request the extension prior to*** the original due date. Late work received , otherwise, receives a zero. Rationale: You cannot turn in a grant late and in an IRL environment you are expected to let your supervisor know if you are going to miss a deadline.

Course & Classroom Policies and Expectations

Recording Class Sessions. Some classes will be on Zoom and some hybrid in HBH – all will be recorded and available on Canvas.

Food/Drink. You are permitted to eat and drink in class as long as you do not disrupt others in the class (or Zoom) and, of course, clean up and dispose of any trash after class (if in HBH definitely and at home, well, your choice). All Covid safety measures must be maintained.

Cell Phones. Turn off or, at least, mute your cell phone during class sessions and **keep them in your bag/in a drawer at home.**

Intellectual and Professional Integrity
This course is an integral part of your graduate education, an education that is designed to provide you with the tools for a successful, professional career. Assumed within is a high standard of ethics and integrity. You are expected to have read and understood the Student Handbook. Plagiarism and other forms of academic misrepresentation are viewed as extremely serious matters. Misrepresentation of another's work as one's own is widely recognized as among the most serious violations. Cases of cheating and plagiarism will receive a grade of zero and, per requirements, be submitted to and reviewed by the Dean's Office where more severe penalties may be imposed, up to and including expulsion from the Heinz School. If any academic integrity violation occurs during this course, the assignment will receive a zero for all those involved and the violation will be reported to the Dean of Heinz College and CMU Office of Students.

Collaboration and discussion around the projects will be frequent and common during class. Your experiments should be with your lab partners only and your class curation, weekly news and project/review work solo.

In addition to the guidelines concerning work materials, you are expected to behave in a supportive and professional manner towards your colleagues/classmates; this includes sharing resources for mutual benefit protecting information told in confidence, and helping to create a general classroom climate of honesty and respect.

Special Needs and Interests
My goal is to provide the most effective educational atmosphere for all students. Please let me know, in confidence, early in the semester if you have any special needs (broadly defined). Also note that the university provides significant support should you find yourself struggling with writing (the International Communication and the Global Communications Centers are both available to you) or with work/life balance.

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of a professional education experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, please seek support or help your peer do so. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at http://www.cmu.edu/counseling/. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.