University of Waterloo
Stratford Campus
GBDA 229
Hybrid Digital Media
Fall 2018
Thursdays 9:00 – 11:50 pm, DMS 3129

Instructor Information
Instructor: Professor Jessica Thompson, MFA
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Calendar Description
This course introduces students to contemporary approaches in digital media production through hands-on learning exercises that cultivate both technical proficiency and creative expression. Course topics may vary from term to term.

Course Description
Hybrid media is a transdisciplinary approach that fuses different media and genres into new forms, and transcends boundaries between art, design, and technology, and between traditional and new media. This year, we will use mobile platforms to explore the intersections between physical and virtual worlds, and how the novel and unconventional use of mobile technologies can be used to address both present and future design challenges.

Course Goals and Learning Outcomes
This course is designed as a hybrid seminar/studio that uses design thinking as a methodology for creative, human-centered problem solving. The course is organized to support the following objectives:
- The production of *innovative solutions* to design challenges using a variety of digital prototyping materials;
- The use of *exploratory research* and *creative problem solving* to overcome conceptual, technical and logistical challenges at various states of the design process;
- The development of *human-centered solutions* that address the needs, desires and abilities of different audiences;

Upon completion of this course, students should be able to:
- Use a variety of observation methods to generate insights, and communicate those insights through clear, compelling approaches to information design.
- Develop low and high fidelity digital prototypes to explore ideas, gather information and test limits;
- Design user tests to gather information, validate design decisions, generate insights and to assess, evaluate and integrate user feedback into the design process;
- Develop or improve technical proficiency in visual communication and content creation using standard

and emerging software;

- Develop digital outputs to clearly and vividly communicate concepts, background and solutions, while integrating best practices from human-centred design, interface design, user-experience design and print design.

Required Texts

- Hanington, Bruce, and Bella Martin. *Universal Methods of Design: 100 Ways to research complex problems, develop innovative ideas, and design effective solutions*. Beverly, MA: Rockport, 2012. Hardcover/ paperback editions available through the University Bookstore, Amazon ($35) Digital Edition available through the UWaterloo Library Electronic Resources (free!)
- Additional content (articles, videos, case studies) will be available on LEARN

Additional Texts

The following books are not required, but may be useful for students who are intending to pursue a career in graphic design, UX or UI. Texts with a * are considered foundational to the field, and while (charmingly) outdated in some areas, provide essential concepts that inform current approaches:

- Buxton, Bill. *Sketching user experiences: getting the design right and the right design*. Amsterdam: Elsevier/Morgan Kaufmann, 2007.*
- Cooper, Alan, Robert Reimann, and David Cronin. *About face 3: the essentials of interaction design.* John Wiley & Sons, 2007.*
- Eyal, Nir, and Ryan Hoover. *Hooked how to build habit-forming products*. Princeton, NJ: Princeton University Press, 2014.
- Lidwell, William, Kritina Holden, and Jill Butler. *Universal Principles of Design*. Beverly, MA: Rockport Publishers, 2010. (or Pocket edition, 2015)
- Krug, Steve. *Don't make me think!: a common sense approach to web usability*. Pearson Education India, 2000.*
- Lupton, Ellen. *Thinking with type: a critical guide for designers, writers, editors, & students*. New York: Princeton Architectural Press, 2010.*
- Lupton, Ellen, and Jennifer Cole Phillips. *Graphic design: the new basics*. New York: Princeton Architectural Press, 2015.
- Norman, Donald *Emotional design: why we love (or hate) everyday things*. New York, NY: Basic Books, 2005.

Course Requirements and Assessment

Assessment	Date of Evaluation	Weighting
A1 Information Design	September 20	15%
A2 Experience Prototype	October 25	25%
A3 Design Challenge	November 22	25%
A4 Case Study	November 29	15%
Discussion Board Posts (6 x 3%)	see Calendar	8%
Participation	ongoing	12%
Total		100%

Assignment Descriptions

Short descriptions are provided below. Full descriptions will be introduced on the days indicated in the schedule.

A1   Information Design

Drawing from the qualitative and quantitative observation methodologies discussed in the first section of this course, select a public space in Stratford and spend a minimum of four hours observing citizen activity. Develop a series of datasets to document the activity, and, using this data and related materials, design a detailed, accurate, robust and original *information design* (*infographic)* to clearly and vividly represent, contextualize, and communicate your findings.

A2   Experience Prototype

Using A1 as a starting point, and design thinking as a methodology, design, prototype and test a digital prototype that transforms the experience of your chosen space through mobile storytelling, immersive environments, pervasive gaming or playful interaction.

A3   Designing the Future

In this assignment, your observations, research and prototypes will contribute to a collaboratively developed future design solution for the City of Stratford in the 'near future' (~50 years). Working in a small team, you will 'combine and extend' your prototypes from A2 into functional design prototypes that integrate physical, digital, or combined, 'physical-digital' technologies.

A4   Case Study

Using your either your A2 Experience Prototype or your A3 Design Challenge, design, print and 'finish' a *case study* to present, explain and showcase your chosen project as either a brochure (a document that is folded together) or a booklet (a document that is stapled, bound, or folded into a book-like format).

Discussion Board Posts

Our Discussion Boards in LEARN will be used to create short written responses designed to further your thinking on the subject matter, expand on ideas introduced in class, or document, assess and expand upon works in process. *Instructions will be posted on each board and will be graded on a scale of 0 to 3.*

Participation, Preparation and Engagement

In this course, participation is an active process that combines preparation for class, engagement in classroom activities, intellectual and creative contributions to discussions, workshops and in-class studios, and the development of productive, collegial relationships with others. Preparation for class includes arriving with readings and interim assignment deliverables complete. Engagement within the classroom includes contributing to the classroom environment by asking questions and sharing insights, and actively participating in in-class activities, 'design sprints', exploratory exercises and peer review. Assessment is ongoing and is divided evenly over our 12 class sessions (1%/class x 12 classes = 12%).

Course Outline

While we will make every effort to follow the schedule as outlined here, it is subject to change. Schedule changes will be outlined in class and posted to LEARN.

Week	Date	Topics	Readings Due	Deadlines
1	September 6	Intro to the Course, A1 Intro, Observation Methods	*Hanington (optional)*	
2	September 13	Information Design	Tufte, D'Ignazio	D1 Due
3	September 20	*A1 Critique*, A2 Intro, A4 Intro, Designing for Print		A1 Due
4	September 27	Designing for People, Experience Prototyping, Design Frameworks	Hanington, Kurtuldu, Buchenau	D3 Due
5	October 4	Locative Media, Game Structures, Intro to ARIS	de Souza e Silva, Frith	D3 Due
6	October 18	Evaluative Methods, Open Lab	Hanington, Philips	D4 Due
7	October 25	*Usability testing lab (A2 Critique)*, A3 Intro		A2 Due
8	November 1	Speculative Design, Design Thinking	Dunne, Nottrodt	D5 Due
9	November 8	Design Sprint, Usability testing lab	Knapp	
10	November 15	Open Lab, Print Production		D6 Due
11	November 22	*A3 Critiques, group 1*		A3 Due
12	November 29	*A3 Critiques, group 2*		A4 Due

Late Work

All assignments are due as per the deadlines indicated on LEARN. Late assignments are subject to 5% (per day) penalty, including weekends. Penalties for late assignments will be deducted from the grade received on the assignment. If a student is unable to submit an assignment on time due to extenuating circumstances, appropriate documentation must be provided. Late Discussion Board posts will receive a maximum of 1.5/3.

Working in Teams

Individual and group assignments are indicated in the syllabus. Individual assignments are to be completed by each student alone, and in collaboration with other students as indicated (i.e. User testing, in-class brainstorming sessions, etc.). Collaboration on the production of individual deliverables (i.e. working on designs, sharing code, providing writing services, sharing datasets, etc.) constitutes *unauthorized collaboration* as outlined in Policy 71.

Group assignments are to be competed collaboratively, including effectively managing goals, tasks and workflow, completing deliverables on time and on schedule, managing change and learning from mistakes, and engaging in healthy conflict. Each team member is expected to make tangible contributions to the project, drawing from his or her expertise, and/or developing new skills and expertise. These contributions will be

assessed in a peer evaluation following assignment 3. Group members whose contributions are disproportionately less than the contributions of their team will receive a modified final grade.

Attendance Policy

Students are expected to attend all classes, however an absences may be excused in circumstances such as illness or emergency. Any request for an excused absence must be accompanied by appropriate documentation. Please also review UW's Policy on [Accommodation Due to Illness](#).

Instructor Contact⯑

I am available to answer questions outside of class. Please post questions and information that will benefit others to Slack. Otherwise, please visit during office hours, or send an email with 'GBDA 229' in the subject line so I can find your question quickly. Please allow 24-48 hours for a response. Messages received in the evenings and over weekends will be returned the next business day.

Electronic Devices

In this course we will use electronic devices (computers, laptops and mobile phones). Please do not access unrelated material during class time. Presentation slides will be provided following each class.

Materials

In this course, we will use a wide variety of ideation and prototyping materials. Over the course of the semester, students will assemble a Creative Toolkit (see Martin and Harrington, 21). At minimum, your kit should include sticky notes, scrap paper, notebooks, and markers/coloured pens.

Workload

This course involves 3 hours of class time per week. Students can expect to spend up to 5 additional hours per week preparing for class and working on course deliverables. Therefore the time commitment required to achieve the intended learning outcomes for this course is 8 hours per week.

Academic Integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity webpage](#) and the [Arts Academic Integrity webpage](#) for more information.

Plagiarism & Copyright Policy

The offence of plagiarism as defined by Policy 71 (Student Discipline) includes visual and aural plagiarism of creative work (drawings, photographs, graphics, video, sound, graphics, or creative ideas conceived of or made by others). The rules of conduct that apply to text-based work at the University of Waterloo also apply to work completed for creative assignments and research. There are two issues to consider with visual and aural plagiarism: ethics, i.e. expectations related to academic integrity as outlined in Policy 71; and copyright infringement, for which you could also be legally liable. Plagiarism and copyright infringement occur when you produce creative material that is substantially similar to the original source. Please take note of the following points:

- All work submitted for evaluation must be your own. If the submitted work is determined not to be ⯑your own, has been created by another on your behalf, or has been created for another context (i.e. another course, client work, etc.), the Academic Discipline Procedure of Policy 71 will be invoked.
- *Design templates, software plug-ins, icon sets (FontAwesome, noun project, material.io icons, etc.), stock images, and other generative software may only be used with the expressed permission of the*

instructor. Any material that is not yours must be cited using a Project Resource Form. All projects must be accompanied by this form, even if you did not use any external sources.

- Resources are available in the public domain are identified as copyright free or that fall under licenses from Creative Commons. Public domain is a term used for works that are not protected by copyright law. Works identified as Creative Commons allow varying degrees of use. In this case, the authors decide how you can use their content. For more information, see the guidelines on creativecommons.org.

Discipline

A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties.

Grievance

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact your department's administrative assistant who will provide further assistance.

Appeals

A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for Students with Disabilities

The AccessAbility Services office, located on the first floor of the Needles Hall extension (NH 1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

Territorial Acknowledgement

We acknowledge that we live and work on the traditional territory of the Attawandaron (Neutral), Anishinaabeg and Haudenosaunee peoples. The University of Waterloo's Main Campus is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometres on each side of the Grand River. The Stratford School is situated on the traditional territory of the Anishnabek, Haudenosaunee (Iroquois), and the Ojibway/Chippewa peoples. This territory is covered by the Upper Canada Treaties.