University of Waterloo
DMS 3024: Stratford Campus
GBDA 402: Cross-Cultural Digital Business 2
Winter 2017
Tu, 9-11:50 and 1-3:50pm
Wed 9:30-12:20 and 2-4:50pm
Th 9:30-12:20 and 2-4:50pm
Fr 9-11:50, 1-3:50pm

Instructor Information

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First point of contact.

Course Description

In this course students will engage in advanced study of how to adapt digital products and services to suit specific cultures or communities. You will develop proofs of concept, design prototypes, user experience testing reports, and business plans while working with global businesses, consultants, and a community partner.

Our community partner for Winter 2017 is the Royal Society of Arts (RSA) Student Design Awards, a competition that challenges emerging designers to tackle real-world social, economic, and environmental issues through design thinking. As part of the Circular Futures Unilever award, students will design and develop a product, system or business model for Fast Moving Consumer Goods (FMCGs) based on principles of circular design and value creation.

This term is organized around two fast development cycles of iterative design, user experience research, and developing business commercialization skills. Each development cycle focuses on building a creative brief, a user testing report, a portfolio, as well as a pitch presentation. Students will be exposed to presentations on design, prototyping, user testing, building engaging visuals, marketing, and will also participate in guided work sessions. Also offered, will be hands-on workshops that help build the skills to support the development of their projects.

Course Goals and Learning Outcomes

Upon completion of this course, students should be able to:

A. Conceptualize a generative design by
- Addressing client needs
- Conducting relevant, credible market and user research
- Communicating in writing and oral presentation the values, meaning and social implications of a design
- Differentiating a design from pre-existing models
B. Prototype effectively by
- Adapting to variable platforms (high- and low-tech)
- Adapting to variable user demands (including and variable abilities)
- Creating prototypes that effectively address design needs
C. Iterate designs effectively by
- Seeking and actively listening to client feedback
- Conducting and reporting relevant, credible user testing
- Pivoting on and integrating feedback in meaningful prototype revisions
- Rapidly responding to critique in a professional manner
- Providing effective and actionable feedback on designs

D. Manage a project effectively by
- Effectively scaling and scoping projects
- Facilitating positive and productive team communication
- Coordinating human resources to achieve productivity
- Making the most efficient use of limited material resources
- Consistently meeting hard stop deadlines

E. Plan a viable business strategy by
- Conducting relevant market research
- Accurately assessing resource needs

F. Execute a business strategy by
- Creating creative briefs and prototypes that effectively communicate a design concept
- Communicating a confident, polished, convincing pitch in an oral presentation, accompanied by visual media
- Provide polished supporting documents and prototypes to clients

G. Develop team assessment, self-assessment and reflexivity skills by
- Evaluating own performance and set structured and measurable goals for improvement
- Assessing the strengths of one's team members and provide actionable feedback for improvement
- Scoping, committing to, and delivering on one's individualized commitments to the project
- Applying skills learned in previous GBDA courses to novel contexts
- Acquiring new skills via self-directed learning
- Learning and habitually apply project management and team communication tool

Course Requirements and Assessment

For this course, you will predominantly be assessed on the technical quality of the content you produce, its growth and iteration along the way, the consideration of cultural and contextual suitability, and the creative and critical thinking skills your team employs. Many smaller assignments are structured to set deadlines, provide early feedback, pinpoint any problem areas and keep you on schedule. Each assessment (except for the RSA SDA submission and business case study) is counted once per cycle (twice in total).

Assessment	Cycle Weight (x2)	Dates of Evaluation	Final Weight
Group Marks			
Pitch *(Siebel-Achenbach)*	10%	TBD	20%
RSA SDA Submission *(All)*	-	Mar 8, 2017 (4pm - GMT)	10%
Creative Brief *(Tingley, Birke)*	5%	Jan 16 + Mar 13, 2017	10%
Prototype Presentation *(All)*	10%	Feb 8 + Mar 30, 2017	20%
User Testing Report *(Nacke)*	7.5%	Jan 30 + Mar 20, 2017	15%
			75%

Individual Marks

Business Case Studies *(Siebel-Achenbach)*	-	March 31st, 2017	5%
Portfolio *(Willemsen)*	5%	Feb 13 + Apr 3, 2017	10%
360 Review *(Willemsen)*	5%	Feb 10 + Mar 31, 2017	10%
			25%

Total	100%

For group assignments, you will receive a group mark. Your solo grade is heavily derived from your portfolio work, case studies, and peer-evaluations, so working well with a team and carrying the weight of the project equally (and avoiding either under-contributing or over-contributing) is essential if you want to do well in the course

Assessment 1: Creative Brief

The Creative Brief is a written page that responds to a design problem by outlining how you intend on solving the design problem. It outlines the problem, the solution, the design requirements (constraints), the user, the customer, and the overall tone of your design. The creative brief should be created in the beginning of the design process and referred to throughout every step of the design.

Assessment 2: User Testing Report

Building successful designs and interactive systems is difficult, but user testing ensures an optimal user experience once a product goes from prototype toward release. Several user tests (often iteratively done at every prototype iteration) ensure you are building a product, system, or service that your users will benefit from and feel comfortable using. A user testing report reports on the (qualitative and quantitative) user research methods used and presents findings from the tests, it then uses these findings to make recommendations toward the design of the final artifact. You will be graded on the quality and comprehensiveness of your user testing reports.

Assessment 3: Prototype Presentation

The Prototype is the process of materializing your ideas into physical form. In the prototyping phase of the project we iteratively move through ideas and think with our hands. The prototyping part of each cycle will begin once we have completed the creative brief, with the creation of a number of prototypes, which we will then test, analyse, and then refine. Your prototyping presentation is a 10-minute presentation that outlines this process. This will happen at the end of every cycle.

Assessment 4: Pitch

The Pitch is the culmination of each development cycle. Your pitches will be structured similarly in terms of timing, organization, and elements you must cover. Near the end of each cycle, you will have 10-12

minutes to present your polished design visions, demonstrating your final prototype, and communicating the core elements of your vision, marketing, and user studies, and to highlight the future development potential of your prototype.

Assessment 5: RSA SDA Submission

Your submission to the RSA Student Design Award will be checked against a checklist of submission requirements. This is a pass or fail check. However, before the submission, it is important to be aware of the judging criteria of the award, which are: (1) Social and environmental benefit – how does your design benefit society and the environment? (2) Research and insights – how did you investigate this issue? What were your key insights? (3) Design thinking – how did your research and insights inform your solution? How did you develop, test, iterate and refine your concept? Demonstrate the journey you've been through to the end result. (4) Commercial awareness – does your journey make sense from a financial point of view? What is the competitive environment your solution would sit within? (5) Execution – we are looking for a design that is pleasing and looks and feels well-resolved. (6) Magic – we are looking for a bit of 'magic' – a surprising or lateral design solution that delights. *Meet all of these criteria for a successful submission.*

Assessment 6: Portfolio Submission

The Portfolio submission is an **individual assignment**. It is the documentation of your group project, as well as your individual contributions. It will be submitted at the end of each development cycle. Your portfolio will be a complete and professional documentation of the projects completed during this course, but will specifically highlight your <u>individual contributions</u>. The exact nature of this document (i.e., how it is documented) will be dictated by the project itself and your personal aesthetic vision. It should be professional, concise, and clear.

Assessment 7: 360 and Cycle Review

At the end of each of the two design cycles, students will complete a 360 review and a Cycle review. The 360 is a peer review assessment form, where students review their teammates during the cycle. The Cycle Review is a final meeting, where the students meet as a group and review the successes and failures of the last cycle in order to determine areas for personal improvement. This is similar to a post-mortem in some industries, where at the end of a project, the things that went well and things that did not go well are summarized in an attempt to benefit the next iteration of a project through the lessons learned in the current project. Similarly, these cycle reviews will help the groups to improve their next design cycle iteration. The 5% per cycle review are broken down into 2% for showing up to the Cycle Review and 3% for the 360 peer review process.

Assessment 8: Business Case Studies

Business Case Studies involves the reading of an assigned case study available on the Learn site. Students are expected to assess the case and come prepared to discuss the situation from a commercial perspective. Students are expected to participate in the analysis of the case and a mark is being assigned to encourage that.

Note: The instructor(s) reserve full authority to assign group project marks. Using the team contract, documentation, and end-of-term peer assessments, if they deem that an individual has not carried a proportionate workload as outlined in the team contract, nor made themselves available for team work periods, and/or has submitted work of such low quality that team members have had to substantively re-do that work, they reserve the right to assign an individual grade that is proportionate to the individual members' contribution to the team. Accordingly, please be mindful of how well each of you work with others: complete your tasks in a timely manner, help your teammates, and demonstrate community-minded behavior.

Course Outline

The class is taught in two sections. Instructors will teach topics that they have the most expertise in, therefore instructors may vary on different sections and days. In addition, Fridays will serve as discussion days with the instructor team, where feedback will be gathered and you can receive mentoring.

Week	Date	Topic	Due
1	Jan 3	Introduction and Syllabus	
	Jan 4	Introduction to Design Cycle 1, Exercises	
	Jan 5	RSA Presentation, Method introduction	Team assignment
	Jan 6	Discussion about Creative Brief	
2	Jan 10	Focus on Customers	
	Jan 11	Focus on Users, Understanding Users, HCI	
	Jan 12	Emotional Design, Creative Brief Presentation	
	Jan 13	Workshops (several topics)	
3	Jan 17	Market analysis	Creative Brief (Jan 16)
	Jan 18	Focus on Prototyping	
	Jan 19	Change by Design, Lo-Fi prototype work	
	Jan 20	Lo-Fi Prototype presentations, review, feedback	
4	Jan 24	Marketing	
	Jan 25	User Research and Testing, Me-Fi prototype work	
	Jan 26	User Testing in the wild, UT reports prep	
	Jan 27	UT sessions	
5	Jan 31	Pitch practice sessions	Pitch? UT Report (Jan 30)
	Feb 1	Hi-Fi Prototypes work sessions	
	Feb 2	Hi-Fi Prototypes work sessions	
	Feb 3	Hi-Fi Prototypes presentation practice and discussion	
6	Feb 7	Cost and investor analysis	
	Feb 8	Prototyping Presentations (Assessment)	
	Feb 9	Portfolio Workshop	
	Feb 10	Cycle Review, 360 Review	360 Review
7	Feb 14	Pricing. Guided work session - RSA commercial	Portfolio (Feb 13)

		awareness	
	Feb 15	RSA Competition Work Session	
	Feb 16	RSA Competition Work Session	
	Feb 17	RSA Competition Work Session	
READING WEEK			
9	Feb 28	Pitch Presentations	RSA Competition Materials
	Mar 1	Cycle 2 Introduction, Engaging visuals presentation	
	Mar 2	Creativity & Innovation, Design Firms, In the wild	
	Mar 3	Creative Brief Discussion	
10	Mar 7	Interpersonal skills and the power of the word	
	Mar 8	Gamification and Gameful Design Heuristics	
	Mar 9	Creative Brief presentation and critique	
	Mar 10	Workshops (several topics)	
11	Mar 14	Business plan and financials	Creative Brief (Mar 13)
	Mar 15	UT Planning, Work on prototypes	
	Mar 16	Work on prototypes	
	Mar 17	UT Sessions	
12	Mar 21	Business plans and personal skills	UT Report (Mar 20)
	Mar 22	Design Sprint	
	Mar 23	Design Sprint	
	Mar 24	Pitch Presentations	
13	Mar 28	TBD	
	Mar 29	Design Sprint	
	Mar 30	Design Sprint	
	Mar 31	Cycle Review, 360 Review	Portfolio (Apr 3)

Course Readings

The following readings will be assigned for class. Please refer to LEARN for the corresponding dates.

Norman, Donald. "Emotional Design" – Chapters 1 – 3.
Brown, Tim. "Change By Design". Chapters 2 - 4.
Moggridge, Bill. "Designing Interactions" Chapt 10.
Rubin, Jeffrey and Chisel, Dana - Handbook of Usability Testing - Chapter 9.
Field Guide to Human Centric Design, Pages 1-25.

Course Disclaimer

Final course grades may be adjusted to conform to program or Faculty grade distribution profiles. This course outline documents our intentions for this course. If over the period of the academic year, it becomes apparent that modifications are necessary, the following strategy will be pursued: Any

necessary modifications that may influence student success or the marking scheme will only be made after in-depth, frank discussion with the students.

Announcements and Course Updates
Announcements, grades, lecture slides, information on exams, project assistants assigned to this section of this course, and other course materials will be posted on to LEARN. Check LEARN daily. Any changes and critical information will be posted on LEARN. You are responsible for making yourself aware of any changes made to the course by checking LEARN daily.

Work Submission Policy
With the exception of physical prototypes, all work must but be submitted to the designated dropbox on LEARN by the posted deadline. This includes all documentation that is required in advance of your mentoring sessions and workshops. Submissions MUST be in the appropriate file format (often PDF). At the end of each cycle on your postmortem day, you must submit and leave all physical prototypes for evaluation.

Backup Your Work
It is recommended that students backup their work frequently and to several different hard drives or USB sticks. Computers suffer failures all the time. Students should expect this in their workflow. Investing in a USB thumb drive or external hard drive is always a good idea when working in a class that makes use of digital equipment.

Attention to Detail
Students should always follow the specifications listed in the project instructions, for instance, the use of specific filenames when submitting projects, deadlines and grading rubrics.

Email Policy
Please use emails for administrative matters only. Your professors will be available during office hours, or by appointment, to discuss course material. Please kindly refrain from writing emails longer than 500 characters. When writing emails, expect answering delays of at least 48 hours up to a week (we also recommend following this online guide to writing short and effective emails to your professors: https://goo.gl/1mfx7L). If something is urgent, please discuss with the responsible professor after class. During regular business hours (Mo-Fr, 9am-5pm) professor will check emails regularly. You should not expect to hear from them evenings or weekends. For the fastest response, talk to the professors in class. Please use **[GBDA 402]** plus a succinct statement as your **email subject** – this helps your professors filter email accordingly.

All e-mail communication sent from students to instructors (including PAs), and from students to staff, must originate from the student's own UWaterloo e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from an UWaterloo account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at their discretion.

Late Work

Individual assignments submitted late without approved extensions will be subject to late penalties. 5% will be deducted for projects that are handed in within 24hrs after the deadline and an additional 5% per day thereafter (including weekends) up to a maximum of 50%. After that time a grade of 0% will be assigned for the late work. Late penalties are not recoverable.

Deadlines

Assignments are due by the date given in the schedule at the time of day specified. Extensions to assignment deadlines will be granted only in cases of illness or emergency. Extensions are granted based on the discretion of the instructor. Students should contact the instructor as soon as possible to make their requests and provide credible documentation (such as a doctor's note or a Verification of Illness Form).

Information on Plagiarism Detection

Students and faculty at the University of Waterloo share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness, and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

We reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by software (e.g., Turnitin.com or Grammarly). Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents for five academic years. The instructors may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student.

Electronic Device Policy

Cell phones must be turned off during lectures. If you forget to turn off your cell phone and it rings during class, we reserve the right answer it. You should only use your electronic devices in a way that makes you more productive in class or allows you to participate in enhanced learning activities. Disruptive laptop use (gaming, watching videos, etc.) will not be tolerated. Sometimes you will be asked to close or shut down your electronic devices for class activities. You must follow this advice without exceptions.

Attendance Policy

Participation necessarily requires attendance. Failure to attend classes will affect your final mark. You are allowed to miss a maximum of two classes over the term without excuse or repercussions. Lecture

notes are not a substitute for class attendance. Do not interrupt class mates. If you arrive late or need to leave early, please sit near the back. You are a valued professional, please govern yourself accordingly.

A note on copyright free and Creative Commons:

Resources are available in the public domain that 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. If an image is in the public domain then you are allowed to use it—to copy it, to manipulate it and to distribute it. Works identified as Creative Commons allow varying degrees of use. In this case, the authors decide how you can use their images.

Helpful Links:

- CARFAC (Canadian Artists Representation / Le front des artists canadiens) ([CARFAC website](#))

- Wikimedia Commons and Flickr have databases of digital files that are available for use. You need to check the conditions of use as they vary: (Wikimedia Commons website; [Flickr Commons link](#))

- The Copyright Act in Canada was recently amended to reflect the current digital landscape. To find out more about the "Copyright Modernization Act", check out: ([Canadian Copyright Act link](#))

- The following is a conversation that occurred on the US-based site, Copyright Advisory Network. It answers some of the basics related to US Copyright, images and fair use: (http://librarycopyright.net/forum/view/1456)

- The following document defines works in the public domain for United States as of January 1, 2013: (http://copyright.cornell.edu/resources/docs/copyrightterm.pdf)

Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009

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 (https://uwaterloo.ca/academic-integrity/)](https://uwaterloo.ca/academic-integrity/) and the [Arts Academic Integrity Office Webpage (http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility)](http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility) for more information.

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](https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70) (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70).

When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline

A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (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. For information on categories of offenses and types of penalties, students should refer to Policy 71, Student Discipline (http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check Guidelines for the Assessment of Penalties (http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm).

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 (http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm).

Note for Students with Disabilities

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, 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 OPD at the beginning of each academic term.