Instructor Information
Instructor: Dr. Adam Bradley
Office Hours: Thursday, 3:00 – 4:00pm
Email: adam.bradley@uwaterloo.ca

Course Description
In this course we will investigate the key moments in the inception of technological networks, specifically as they relate to the idea of futuring. From wax tablets in antiquity, to the invention of papyrus, the printing press, the sudden change from text to sound in cinema, and our own current digital networks, the distribution and reception of technology has always been thought of in terms of innovation and newness. In this course we will look at the history of technology mediated by a critical eye, but will also project towards the future in our individual and group projects. Science fiction and design futuring provide an important critical lens through which to view current technologies and research directions, and imagine new ones. In this course students will engage in the process of future-thinking and imagine new objects, services, and experiences that incorporate the lessons we have learned about technological innovations from the past.

Course Goals and Learning Outcomes
We will be discussing the assigned texts in significant detail. My central expectation is that you come to class fully prepared. Being fully prepared means that you have read the required texts, you have given them some thought, and you have arrived in class with something relevant to say about them, or with a question in mind. To participate fully, you must bring your books to class with you. Please be on time, and plan to attend every class.

Required Texts
- Available on-line

Course Requirements and Assessment

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<thead>
<tr>
<th>Assessment</th>
<th>Date of Evaluation</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Participation and Attendance</td>
<td></td>
<td>20%</td>
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<tr>
<td>Essay on Arthur Radebaugh</td>
<td>February 2nd, 2017</td>
<td>15%</td>
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<tr>
<td>Leading a Discussion (Chapter Summary + Discussion)</td>
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<td>25%</td>
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<tr>
<td>Final Project: Technological Design as a Futuring Practise</td>
<td>March 23rd 2017</td>
<td>40%</td>
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<td>Total</td>
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<td>100%</td>
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Assignment #1 – Engaging Arthur Radebaugh

Arthur Radebaugh was a futurist and illustrator known for his visions of how technology will look in the “distant” future. In this assignment, students will choose a particular vision that Radebaugh produced about the future and engage with it critically using one of the texts we deal with in this course. The goal of this assignment is to produce a short essay discussing how Radebaugh’s view of the future either aligns with or veers away from the themes in the chosen critical text.

Assignment #2 – Text Summary and Discussion (partners)

Each team will choose a particular text in this class and prepare a summary and set of discussion questions that they will hand out to the rest of the seminar before their presentation that particular week. Presentations should be in the range of 30 mins and will focus on portions of the text that each presenter feels would be an interesting jumping off point for a round-table discussion. Seminars will be graded on the quality and relevance of the handout (remember to align the work you put in with the percentage of the grade being given for this assignment), as well as the organization and presentation of the text itself.

Final Project – Technological Design as a Futuring Practise

For the final project, we will collectively be making a catalogue that could appear 100 years in the future (think Ikea catalogue for the Jetsons). Each group will be asked to produce a two-page spread that will make up a specific section of the final catalogue. Each two-page section will include 4-5 technologies re-imagined in the context of how the individual groups feel that humans will have developed to receive them in the future. Each group will be assigned an overarching theme such as “the kitchen”, and their section of the catalogue will focus on those design spaces. These themes will be arrived at as a group so as to produce a coherent object produced collectively as a class. Using the theoretical grounding acquired from the texts in this course, each group will also produce a write-up for each product external to the layout. The goal of this project is to imagine the future through the lens provided by the historical texts in this course.

Course Outline
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Readings Due</th>
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| 1    | Jan. 5 | Intro Material - Syllabus review and expectations  
Hiroshi Ishii - “The Last Farewell”                                                                                                                   |
Marshall McLuhan - "The Medium is the Message"  
Martin Heidegger - “A Question Concerning Technology”  |
| 3    | Jan. 19| Jacques Bertin - Semiology of Graphics (slide deck)  
“The Semiotic Landscape”  
“Representation and Interaction: Designing the Position of the Viewer”  
“The Meaning of Composition”  
Roland Barthes - "Rhetoric of the Image"                                                                                                        |
| 4    | Jan. 26| Elizabeth Eisenstein - “The Printing Press as an Agent of Change”  
Roland Barthes - “The Death of the Author”  
Aldous Huxley - Brave New World (excerpt)                                                                                                        |
| 5    | Feb. 2 | Stuart Hall - “Encoding and Decoding”  
Susan Sontag - “Plato’s Cave.”  
Bernhard Stiegler - “Prometheus’ Live”                                                                                                           |
| 6    | Feb. 9 | Janet Murray - Inventing the Medium (excerpt)  
Ian Bogost - Rhetoric of Video Games                                                                                                                 |
| 7    | Feb. 16| Don Ihde – “Bodies in Technology”  
Sidney Pekowitz - Digital People (except)  
Donna Haraway - “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century” |
<p>| 8    | Feb. 23| Martin Heidegger – “The Thing”                                                                                                                  |</p>
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<th>Week</th>
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<tr>
<td></td>
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<td>George Steiner – Language and Silence (excerpt)</td>
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<td>9</td>
<td>Mar. 2</td>
<td>Vannevar Bush – “As We May Think”</td>
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<td>Mark Helprin – “The Acceleration of Tranquility”</td>
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<td>Mark Weiser – “The computer for the 21st century”</td>
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<td>10</td>
<td>Mar. 9</td>
<td>Hiroshi Ishii and Brygg Ullmer – “Tangible bits: towards seamless interfaces between people, bits and atoms”</td>
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<td>Chris Harrison, Desney Tan, and Dan Morris – “Skinput: appropriating the body as an input surface”</td>
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<td>11</td>
<td>Mar. 16</td>
<td>Keith Cheverst, et. Al. - “Using Context as a Crystal Ball: Rewards and Pitfalls”</td>
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<td>Thomas Erickson - “Some problems with the notion of context-aware computing”</td>
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<td>12</td>
<td>Mar. 23</td>
<td>Group Presentations</td>
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**Attendance Policy**

Participation means that you come to class with the text, ready to express your own ideas and exchange them with your other classmates and myself. Attendance is crucial but attendance alone does not count for full participation.

**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 Integritiy Webpage](https://uwaterloo.ca/academic-integrity/) and the [Arts Academic Integrity Office Webpage](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).
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 [Policy 71, Student Discipline](http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check Guidelines for the Assessment of Penalties [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 [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.