History 411E
Technology and Society in North America
Mondays 12:30-2:30 SSC 8426
Professor Rob MacDougall
Department of History
Office Hours: Mondays 3:00-5:00 SSC 1003 or by appointment

Course Description
This seminar explores the social history of technology in Canada and the United States from the colonial era to the present day. Our class will study the ways in which technology has been shaped by its social, cultural, and political contexts, and how technology has shaped North American society, culture, and politics in return. In the Fall Term, we will focus on the history of technology in North America before 1900, from European and Native American technologies at the time of first contact to the coming of the railroad, factory, telegraph, and telephone. In the Spring Term, we will examine such twentieth-century technologies as the automobile and the assembly line, radio and television, the atomic bomb, the birth control pill, computers and the internet. Our subject is not, primarily, the technical history of science or engineering. Although we will often discuss how machines work, our real subject is the history of human beings, and the interactions between people and the machines, systems, and tools they create.

Assignments and Evaluation
Students will write one substantial research paper (20-25 pages) over the course of the year. A written proposal (2-3 pages) outlining a topic and sources to be used is due in early November. Students will present oral reports on their work in progress during class in January. A rough draft of the research paper will be due in March (this is not optional) and returned to the student with feedback for revision; the final draft is due in April. This paper accounts for 50% of the final grade in total: 10% for the proposal, 10% for the oral report, and 30% for the finished paper. Students will take turns leading class discussion (probably once each term, depending on class size) by introducing the required readings, posing questions to the class, and moderating discussion. These presentations are worth 20% of the final grade. Students will also review one book per term; these reviews will take the form of oral reports to the class, and they account for 10% of the final grade. Finally, students are expected to be active participants in every seminar. Class participation will account for 20% of the final grade. There will be no midterm or final exam.

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<tr>
<th>Assignment</th>
<th>Percentage</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Research proposal</td>
<td>10%</td>
<td>due November 7</td>
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<tr>
<td>Work-in-progress report</td>
<td>10%</td>
<td>in class January 16, 23, 30 and February 6</td>
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<tr>
<td>Research paper</td>
<td>30%</td>
<td>rough draft due March 13, final paper due April 10</td>
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<tr>
<td>Discussion leading</td>
<td>20%</td>
<td>weeks and topics will be chosen/assigned in class</td>
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<tr>
<td>In-class book reviews</td>
<td>10%</td>
<td>weeks and books will be chosen/assigned in class</td>
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<tr>
<td>Class participation</td>
<td>20%</td>
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Required Texts

The following texts are required for this course:

- *History 411E Course Pack* (2 volumes).

First Term

**Week 1**    September 12    Introduction to the Course

**Week 2**    September 19    A Case Study: The Telephone

- Additional primary sources (will be handed out in class).

**Week 3**    September 26    Approaches to the History of Technology


**Week 4**    October 3    Native American Technology

- Jared Diamond, “Necessity’s Mother,” Course Pack I.

**Week 5**    October 10    THANKSGIVING - NO CLASS

**Week 6**    October 17    The Farm


**Week 7**    October 24    The Factory


**Week 8**    October 31    Americans and Technology

- Thomas Hughes, “The Technological Torrent,” Course Pack I.
Week 9    November 7    The Railroad

RESEARCH PROPOSAL DUE NOVEMBER 7

- David Nye, “Let Us Conquer Space,” Course Pack I.

Week 10    November 14    System


Week 11    November 21    The Wire

- Carolyn Marvin, “Community and Class Order,” Course Pack I.
- Michèle Martin, “The Culture of the Telephone,” Course Pack I.
- Ronald Kline, “(Re)inventing the Telephone,” Course Pack I.

Week 12    November 28    Invention


Week 13    December 5    Canadians and Technology

- Bruce Sinclair, ed., Excerpts from *Let Us Be Honest and Modest: Technology and Society in Canadian History*, Course Pack I.
- George M. Grant, Excerpt from *Ocean to Ocean: Sandford Fleming’s Expedition Through Canada in 1872*, Course Pack I.
- George Johnson, Excerpt from *The All-Red Line: The Annals and Aims of the Pacific Cable Project*, Course Pack I.
- Bruce Sinclair, “Canadian Technology: British Traditions and American Influences,” Course Pack I.
- Maurice Charland, “Technological Nationalism,” Course Pack I.
Second Term

**Week 14  January 9  The Automobile**
- Robert and Helen Lynd, “Inventions Re-making Leisure,” Course Pack II.
- Kathleen Franz, “The Open Road: Automobility and Racial Uplift in the Interwar Years,” Course Pack II.

**Week 15  January 16  Student Presentations**

**Week 16  January 23  Student Presentations**

**Week 17  January 30  Student Presentations**

**Week 18  February 6  Student Presentations**

**Week 19  February 13  The Radio**
- Mary Vipond, “The Beginnings of Radio Broadcasting in Canada,” Course Pack II.

**Week 20  February 20  Gender and Technology**
- Nina Lerman, “Interrogating Boundaries,” Course Pack II.
- Jeffrey Sconce, “Mediums and Media,” Course Pack II.

**NO CLASS FEBRUARY 27 (CONFERENCE WEEK)**

**Week 21  March 6  Domestic Technologies**
- Lynn Spigel, “Women’s Work,” Course Pack II.
Week 22  March 13  Military Technologies

ROUGH DRAFT OF RESEARCH PAPER DUE MARCH 13

• Thomas Misa, “The Means of Destruction,” Course Pack II.

Week 23  March 20  Failed Technologies

• Paul David, “Clio and the Economics of QWERTY,” Course Pack II.
• Denis Smith, Excerpt from *Rogue Tory: The Life and Legend of John G. Diefenbaker*, Course Pack II.
• Kenneth Lipartito, “Picturephone and the Information Age: The Social Meaning of Failure,” Course Pack II.

Week 24  March 27  The Pill

• Elizabeth Siegel Watkins, “Genesis of the Pill,” Course Pack II.
• Andrea Tone, “The Pill in Practice,” Course Pack II.

Week 25  April 3  The Internet

• Janet Abbate, Excerpts from *Inventing the Internet*, Course Pack II.
• George Gilder, “The Lifespan Limit,” Course Pack II.
• Lawrence Lessig, “The Internet Under Siege,” Course Pack II.

Week 26  April 10  The Future

RESEARCH PAPER DUE APRIL 10

• Howard Segal, “The Technological Utopians,” Course Pack II.
• Charles Jonscher, “Digital Technologies of Tomorrow,” Course Pack II.
• Ziauddin Sardar, “Western Colonization of the Future,” Course Pack II.
• Bill Joy, “Why the Future Doesn't Need Us,” Course Pack II.