Arts and Science 3BC3  
Technology and Society III  
2017-18, Term 1  

Course Outline

Instructor: Dr. Brian W. Baetz, P.Eng., ext. 27214, email: baetz@mcmaster.ca

Office Hours: Tuesdays, 3:00-4:00 PM; JHE-119

Class Times and Locations:  
- Wednesdays, 12:30 – 2:20 in ITB-139  
- Fridays, 12:30 – 1:20 in ITB-139

Course Description and Course Objectives

This is one of three inquiry courses in the Arts and Science Program that relate to the overarching theme of technology and society. The focus of this specific course will be on the broad area of livable communities, and how technological aspects can enhance and potentially detract from a community's livability. A major purpose of the course is to further your skills in carrying out all of the phases of a scholarly inquiry. An inquiry on technological change and its effects on our communities, in either historical or future contexts, will be conducted.

A second major purpose of the course is to provide an opportunity for you to examine the challenges in achieving a livable community, and the place of technology in that effort. Enhancing the livability of our communities through consideration of environmental and social sustainability principles will be a key focus of this course. The related issues are difficult, complex, and important as they will affect your professional and personal lives downstream of McMaster. Community design principles and system-based thinking for community decision-making will be also covered to give you some practical tools for livable community applications.

This course is designed for participatory learning. You are expected to develop your skills in working with others, teaching others, and learning from them. Small group meetings outside of class, as well as in-class interactions, will provide an opportunity for learning in this way. Additionally, icebreaker and leadout aspects in our class meetings will relate to the development of deep skills that will address the incremental enhancement of emotional intelligence and leadership presence.

What is Inquiry?

Inquiry is the process of trying to come to an understanding about something – a problem, an issue, a phenomenon. In its best form it is a self-directed process of research motivated by a genuine interest in understanding something. One of the most critical activities of inquiry involves developing the questions to be pursued. Good questions give inquiry a clear purpose, and serve to guide research.

Some of the skills of inquiry are:

- Identifying, categorizing, and organizing the parts of a situation or problem
- Detecting hidden assumptions
- Formulating issues, and a central question that needs to be answered
- Anticipating possible findings
• Developing a strategy for the research
• Critically assessing written and virtual materials
• Assessing evidence and evaluating arguments
• Reporting your findings both in writing and orally

**Required Texts and Materials**

There is no textbook for this course. All materials will be available through Avenue.

**Work Schedule/Deadlines**

This course has no final exam. Your grade will be based on work done over the whole term. To help you keep on schedule, I have indicated what work needs to be done each week and have listed the deadlines on the Detailed Schedule. This is on AVENUE for your ongoing consideration.

**Work Assessment**

Class Participation (Individual) 15%

Weekly Assignments (Individual) 20%
(submitted electronically on Avenue)

Inquiry Report (Group) 35%
(due in last class on Dec. 7th)

Charette Work (Group) 10%
(due at the end of each charette)

PodCast Presentation (Group) 20%

* Note that the weekly assignments will be graded on a trinary basis: 10/10 – for good work; 5/10 – for marginal work; 0/10 – for poor work or not-completed work. If required work is handed in late, communicate the reasons to the instructor ahead of time to avoid a 10% per working day penalty.

**Learning Outcomes**

Students who complete this course will have achieved the following learning outcomes:

• They will be able to conduct inquiry-based research, culminating in the preparation of a final report and an oral presentation by their group;

• They will have furthered their understanding of what challenges we face in developing livable communities, and the role technology can play in this development;

• They will have gained a more complete understanding of the city that houses McMaster
University;

- They will have explored aspects of deep skills development and understand how enhancement of these skills will make them more well-rounded downstream professionals and citizens.

Field Trips

There will be three Hamilton-based field trips for this course, where transport will be done by public transit or by bicycle. Details are included in this outline for liability reasons, and to underline that these field trips are considered an important and mandatory component of this course. Each field trip will be composed of a half hour travel time, a one hour walkabout duration, and a half hour travel back time.

The purpose of the field trips is to get out of the classroom and experience the sights and energy of three distinct urban environments in the City of Hamilton and experientially evaluate the degree of livability across a range of community features. (Please see Detailed Schedule for dates and times.)

FIELD TRIP 1 – The Heart of the Hammer

Itinerary
- Birks “Flying Horseman” Clock
- Rooftop Terrace of Jackson Square
- Lister Block
- King William Street (Skydragon Centre)
- Downtown Bingo Hall
- The Right House (Hughson and King)
- Gore Park and McCoy Fountain
- Public Art and E. Robert Ross Mural
- Piggott Building (James Street North)
- Bank Buildings and Conversions (James Street South)
- Downtown Churches
- Art Deco Train Station (Hunter and James)
- Georgian Store Fronts (James Street South)
- Four Storey Apartments (along Bold Street)
- Whitehern (MacNab and Hunter)
- Zucker Sculpture Court (Main Street West)
- Art Gallery of Hamilton

FIELD TRIP 2 – Olde Dundas

Itinerary
- Grafton Square and history of Dundas
- Powell Block (Thirsty Cactus)
- Dundas Town Hall
- Building Conversions (Pratt and Whitney aircraft wing, Bertrams factory (DVSA))
- Urban Infill (Hatt and Ogilvie)
• Artist’s Way
• Carnegie Library (Gallery)
• Collins Hotel (King Street West) and streetscape
• Bank corners (Sydenham and King)
• Old Post Office (King and Foundry)
• Pedestrian Connection (East of Shoppers Drug Mart)
• Dundas Central Public School (Melville and Elgin)
• Mansions on Melville (between Elgin and Cross)
• Traffic Calming on Cross (at Park)

FIELD TRIP 3 - Locke Street and the Southwest

Itinerary
• Churches to Antique Stores
• Mixed use on Locke Street
• Side Street residential
• CIBC Bank (Locke and Herkimer)
• Old Filling Station (Locke and Herkimer)
• Churches everywhere
• Alleyway (between Homewood and Aberdeen)
• Stroll down Kent Street to HAAAA grounds on Charlton
• Through Park and down Pearl Street, left on Pine Street
• Building Facades on Locke, observed from East Side
• Allenby Lofts on Hunter Street, ½ block west of Locke

Sustainable Written Work Submission Guidelines

The written work submission guidelines have been chosen to support the more sustainable use of paper, energy, and toner, and meet the Gold standard of the Office of Sustainability; http://www.mcmaster.ca/sustainability/. All written work should be submitted in the following format: double-sided printing; no title page; decreased margins.

Academic Integrity Statement

McMaster Policy on Academic Integrity:
You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences—e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty, please refer to the Academic Integrity Policy, located at: http://www.mcmaster.ca/academicintegrity.

The following illustrates only three forms of academic dishonesty: 1) Plagiarism—e.g., the submission of work that is not one’s own or for which other credit has been obtained. 2) Improper collaboration in group work. 3) Copying or using unauthorized aids in tests and examinations.

MSAF Statement
McMaster Student Absence Form (MSAF):
In the event of an absence, students should review and follow the Academic Regulations in the Undergraduate Calendar “Requests for Relief for Missed Academic Term Work.” Please consult the MSAF statement on our website (https://artsci.mcmaster.ca/forms-requests/) and direct any questions or concerns to Shelley Anderson or Rebecca Bishop in the Arts & Science Program Office as appropriate.

Academic Accommodation of Students with Disabilities Statement

Academic Accommodation of Students with Disabilities:
Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or email sas@mcmaster.ca. For further information, consult McMaster University’s Policy for Academic Accommodation of Students with Disabilities.

Email Contact and Student Responsibility Statement

Please Note:
The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of students to check their McMaster email and course websites weekly during the term and to note any changes. Announcements will be made in class and by using the course email distribution list.

Health and Safety (this is included due to the field trip component)

McMaster’s University Workplace and Environmental Health and Safety Policy states: “Students are required by University policy to comply with all University health, safety and environmental programs”.

It is your responsibility to understand McMaster University Workplace and Environmental Health and Safety programs and policies. For information on these programs and policies please refer to McMaster University Environmental and Health Support Services Occupational Safety Risk Management Manual at: http://www.workingatmcmaster.ca/link.php?link=Job+Matters%3APolicy-Manual
<table>
<thead>
<tr>
<th>Week</th>
<th>Starting</th>
<th>Wednesday (hour 1)</th>
<th>Wednesday (hour 2)</th>
<th>Friday</th>
<th>Work Outside of Class</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>Sept 4</td>
<td>Introduction/Env 1</td>
<td>D1-Urban Form; Public Spaces</td>
<td>I1-Historical Context</td>
<td>• work on Assign. 1</td>
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<td>2</td>
<td>Sept. 11</td>
<td>S1-Systems Thinking</td>
<td>D2-Higher-Density</td>
<td>I2-Future Scenarios</td>
<td>• assemble your Inquiry Group of 3 &amp; list topic preferences • work on Assign. 2</td>
<td>Sept 14 – Assign. 1</td>
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<td>3</td>
<td>Sept 18</td>
<td>Field Tour</td>
<td>Heart of the Hammer</td>
<td>S2-Resiliency</td>
<td>• background Reading for Group Inquiry • work on Assign. 3</td>
<td>Sept 21 – Assign. 2</td>
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<td>4</td>
<td>Sept 25</td>
<td>S3- Scale</td>
<td>D3-Neighbourhoods</td>
<td>I3-Central Questions</td>
<td>• frame central question • work on Assign. 4</td>
<td>Sept 28 – Assign. 3</td>
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<td>5</td>
<td>Oct 2</td>
<td>Field Tour</td>
<td>Olde Dundas</td>
<td>Soc 1 – Happy Cities/Compassion, Equity</td>
<td>• frame anticipated findings • work on Assign. 5</td>
<td>Oct 5 – Assign. 4</td>
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<td>6</td>
<td>Oct 16</td>
<td>D4-Living Design</td>
<td>Env 2 – Transportation Infrastructure</td>
<td>I4-Anticipated Findings/Research Strategy</td>
<td>• frame research strategy • work on Assign. 6</td>
<td>Oct 19 – Assign. 5</td>
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<td>7</td>
<td>Oct 23</td>
<td>Field Tour</td>
<td>Locke Street/Durand</td>
<td>D5-Living Design</td>
<td>• continue Research • work on Assign. 7</td>
<td>Oct 26 – Assign. 6</td>
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<td>8</td>
<td>Oct 30</td>
<td>S4-Human Centered Design</td>
<td>D6-Colour Design</td>
<td>I5-Share Findings</td>
<td>• continue research • work on Assign. 8</td>
<td>Nov 2 – Assign. 7</td>
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<td>9</td>
<td>Nov 6</td>
<td>Env 3-EcoPark</td>
<td>Soc 2-Gender Equity</td>
<td>I6-Key Conclusions</td>
<td>• continue research • work on Assign. 9</td>
<td>Nov 9 – Assign. 8</td>
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<td>10</td>
<td>Nov 13</td>
<td>Charette 1-Streetscapes</td>
<td>Charette 1-Streetscapes</td>
<td>Soc 3-Children and Youth Considerations</td>
<td>• prepare Pres/revise Inquiry • work on Assign. 10</td>
<td>Nov 16 – Assign. 9</td>
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<td>11</td>
<td>Nov 20</td>
<td>Charette 2-LRT Terminal</td>
<td>Charette 2-LRT Terminal</td>
<td>Soc 4-Age-Friendly Communities</td>
<td>• prepare Pres/revise Inquiry</td>
<td>Nov 23 – Assign. 10</td>
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<td>12</td>
<td>Nov 27</td>
<td>I 7 - Pres 1</td>
<td>I 8 - Pres 2</td>
<td>I 9 - Pres 3</td>
<td>• prepare Pres/revise Inquiry • final polishing of Inquiry</td>
<td>Oral Presentations (as studio podcasts)</td>
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<td>13</td>
<td>Dec 4</td>
<td>Last Class- Cootes Hike or Museum of Art</td>
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<td>Dec 7 – Inquiry Report Due in last class</td>
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Legend: Env relates to Environmental Sustainability; I relates to Inquiry; S relates to Systems-Based Thinking; D relates to Design Principles; Soc relates to Social Sustainability; Charette relates to Design Charettes; Pres relates to Final Presentation and Podcast Taping