EXPANDED COURSE DESCRIPTION
ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
Lassonde School of Engineering
Electrical Engineering Computer Science
LE / EECS 6330 3.0 SECTION A
CRITICAL/TECHNICAL PRACTISE: ACC’Y ASSTTECH
FALL 2018 / WINTER 2019

Last Modified Date: 08/20/2018

COURSE CALENDAR DESCRIPTION
This course examines issues of technological design in computer accessibility and computational forms of assistive technology (hardware and/or software). Students learn to critically reflect on the hidden assumptions, ideologies and values underlying the design of these technologies, and to analyse and to design them.

INSTRUCTOR(S)

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<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<tr>
<td>Baljko, Melanie A</td>
<td>Sec. A / LECT / F</td>
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ADDITIONAL INFORMATION

Acknowledgement of Indigenous Peoples and Traditional Territories
We acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Huron-Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders, the Mississaugas of the New Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.

Topics & Concepts
• Characteristics of Assistive Technology (AT), History of AT
• Conceptual framework for ICT accessibility, the digital divide, Universal Design
• Policy frameworks (Canada, US, UK, Australia, EU) for AT and ICT accessibility; reliability and safety, intersection with medical device regulatory framework
• Market forces and economies of scale for AT and ICT accessibility, AT/ICT accessibility research in academia, technoethics of AT/ICT accessibility
• Methodologies for design relevant to AT and accessibility, human-centered design, community engagement; methodologies for evaluation/assessment, success/failure criteria, device abandonment; empirical methods and data collection, qualitative and quantitative methodologies
• Application of methodologies and conceptual framework in real-life design project

Course Learning Outcomes
Upon successful completion of this course, each student will be able to:
• explain the impact of various forces (political policy/regulatory, social, scientific, technological advancement) on the evolution of assistive technology and ICT accessibility and their ecosystems of production and deployment, with particular focus on various conceptualizations of disability
• describe the role of design methodology (including predicative assumptions) on resultant AT and ICT accessibility; interdependency of design
• assess AT and ICT accessibility with respect to usability criteria and other success criteria (mediation of access barriers, such as cost, knowledge)
• explain the benefits of interdisciplinary approaches (software and engineering design in combination with other bases of knowledge) to the design and analysis of AT and ICT accessibility
• describe the computational principles used by specific ATs and ICT accessibility techniques
• design, implement, and evaluate an assistive technology that meets project-specific success criteria

ACADEMIC INTEGRITY LINKS
• Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
• Academic Integrity - http://lassonde.yorku.ca/academic-integrity

STUDENT LINKS
• Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
• Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
• Academic Accommodation for Students with Disabilities - http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/
• Counselling and Disability Services - http://cds.info.yorku.ca/
• York University’s Policies on Sexual Violence - http://secretariat-policies.info.yorku.ca/policies/sexual-violence-policy-on/
• York University’s Policies on Gender/LGBTQ*/Positive Space - http://rights.info.yorku.ca/lgbtq/

LAND ACKNOWLEDGEMENT
• We acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Huron-Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders, the Mississaugas of the New Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.
• The Indigenous Framework for York University: A Guide to Action can be found here: http://indigenous.info.yorku.ca/
• Meaning of a land acknowledgement: http://healthydebate.ca/opinions/indigenous-land-acknowledgements

Many courses utilize Moodle, York University’s course website system. If your course is using Moodle, click here to access it.
Moodle @ York University