Introduction

There is a growing consensus that ICTs can play a significant role in assisting peoples and countries around the world achieve their social and economic goals. Properly and appropriately applied, ICTs may act both as catalyst and platform for creating greater economic prosperity as well as providing the opportunity for people to connect to each other, their economic partners, government administrations, and civil society. ICTs, though transformative, can have both positive and negative affordances and effects. For ICTs to effectively bring about social and economic development they must be presciently and adroitly applied to spur local innovation and address challenges within their context of use. Simply transplanting advanced ICTs will not serve development goals.

Course Description:

Conceptual frameworks to understand the prospects, challenges and roles of information and communications technologies (ICTs) in social and economic development; knowledge and skills to help in the effective planning, development, implementation and management of ICT for development initiatives; case studies

Expected Outcomes:

On completion of this course students are expected to have developed an understanding of:

- The definition and history of ICT4D and key conceptual and theoretical ideas driving the ICT for Development agenda
- Debates around ICTs and their role in International Development
- Good practice and enabling environments to ensure ICTs play a positive role in different sectors of development (e.g., Health, governance, livelihoods)
• Practical application of ICTs within specific development projects

**Prerequisites:**

Enrolment in the MBA Program in the Sprott School of Business.

**The School of Business enforces all prerequisites.**

**Drop Course Policy:**

The deadline for academic withdrawal is the last day of classes (each term).

**Course Procedures and Grading:**

The course will primarily be based around readings from published articles and books as well as other sources (including videos and cases) that illustrate key issues in ICT for Development. Students will be expected to actively participate in the discussions and all associated class activities. The final course grade will be derived as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Reading summaries (2)</td>
<td>30%</td>
</tr>
<tr>
<td>Group Seminar Leadership</td>
<td>20%</td>
</tr>
<tr>
<td>ICT 4D project</td>
<td>40%</td>
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<tr>
<td>Class participation</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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**Deferred Final Examination:**

Students unable to write a final examination because of illness or other circumstances beyond their control must contact the instructor in writing to request a deferred exam. Permission may be granted when the absence is supported by a medical certificate and or appropriate document/s to support the reason for the deferral. Deferred exams are not granted for students who have made travel arrangements that conflict with examination schedule.
**Required Reading and Additional Reading**

Readings will be drawn from a variety of sources. These are listed in the course schedule.

**Additional References**


International Institute for Communications and Development (IICD) [http://www.iicd.org/](http://www.iicd.org/)

**Group Seminar Leadership**

As part of the classroom learning experience students will work in groups of two or three to lead one of the seminars. In leading the seminars students will

- review the papers assigned for that day
- synthesize the most relevant theoretical and practical issues raised in the articles
- supplement the articles with any other relevant material (videos, case vignettes, etc.)
- develop a PowerPoint presentation of the seminar
- lead the class through the seminar. The expectation is that seminar leaders will develop ways to engage the class in an interactive dialog. It should not be a one-way presentation.
- submit the PowerPoint presentation via CuLearn before the start of class.

**Individual Paper Summaries and Analyses**

Over the course of the term each student will be required to submit 2 individual analyses and summaries of papers listed in the course schedule. In doing this assignment the student will select 2 of the papers assigned for that day as well as one additional paper not listed in the schedule (selected by the student). Using the three papers, the student will provide an integrated summary and analysis of the main issues discussed on the papers. The summary should be (double spaced), 4-5 pages long, and should include the following: (See evaluation document as well)
• A brief summary of the articles, giving the reader a clear sense of what the papers were about
• An integrated analysis of the papers. Analyses should
  o be framed in such a way as to allow for comparison across the papers
  o assess the appropriateness and reasonableness of the arguments, concepts, constructs
    and propositions
  o assess the application of theoretical concepts
  o assess the implications for practice in development settings.
• A synthesis of key ideas with conclusions drawn. In doing this the student should express a
  personal point of view relative to:
  o relevance and importance of the issues raised
  o whether the authors have provided reasonable justification for their arguments
  o the insightfulness and contributions of the papers to our understanding of ICTs and
    development

The summaries are due at the beginning of the class in which the papers assigned are being
discussed. Each person will be assigned one topic to focus on for one of the summaries. The
student will have the freedom to choose the second topic. HOWEVER, the student cannot
submit a summary for a class that he/she did not attend. In other words, if you miss a week, you
cannot submit a paper summary for that week. Showing up and then leaving after part of the
class also does not constitute attending. You also may NOT submit a summary for the papers
you are presenting as a group. Your first summary and analysis must be submitted by March 17,
2016. There will be no extensions for the submissions.

Final Essay: Reflections on ICT for Development

The final assignment for the course is an essay of no more than 4-5000 words reflecting on a
particular set of issues related to ICTs and development. Students are expected to use at least ten
original sources (at least 6 from refereed journals). In doing the essay, the student will identify a
particular facet of ICT for development (e.g. the value of mobile technologies fostering social
inclusion) or an application area (e-business, e-government, etc.) on which to focus. Their essay
must not be purely descriptive. It should critically analyze the issue or application being covered
and provide insights that have implications for further study on these topics.

Class Participation:

Participation by students in class discussion and activities is an important part of this
course. Effective participation is possible only by regular class attendance and active pre-class
preparation. You should review the required readings and materials before coming to class. You
will not gain participation marks simply by asking an obligatory question or two. Nor will such
marks be based on the number of questions or comments made. Participation grades will reflect
the total impact the student has had on the class over the term, through significant and insightful
comments, and a demonstration of good problem-solving and analytical skills.
## Summary of Deliverables

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Submit to</th>
<th>Due Date</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Two (2) Individual paper summaries and analyses.</td>
<td>Professor/CuLearn</td>
<td>By 10:00 a.m. on date case is assigned (see schedule)</td>
<td>30</td>
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<tr>
<td>Group Seminar Leadership (as assigned)</td>
<td>Professor/CuLearn</td>
<td>At the start of class on date case is assigned.</td>
<td>20</td>
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<tr>
<td>Final Essay</td>
<td>Professor/CuLearn</td>
<td>Thursday April 14, 2016 (see schedule)</td>
<td>40</td>
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<tr>
<td>Participation</td>
<td></td>
<td>Every class</td>
<td>10</td>
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### Assignment Submission

The individual paper summary and analysis should be submitted **in .pdf format to the professor on CuLearn by 10:00 a.m.** on the day of class. It is the student’s responsibility to ensure that the assignment is received in an accessible format on or before the due date. Assignments are due at the time indicated. Late assignments will be marked down by 10% for every calendar day late.
<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic</th>
<th>Purpose</th>
<th>Readings/Assignment (Textbook or Library Online Resources)</th>
<th>Extra Reading</th>
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</thead>
</table>
| March 3 | Introduction and Class Organization Intro to ICT4D | In this session we will attempt to define the space of ICT4D and discuss its history and central approaches. This discussion will also draw on larger debates regarding the relationship between technologies and social change. | Kleine, D. and Unwin, T. (2009) Technological Revolution, Evolution and New Dependencies: what’s new about ICT4D?, *Third World Quarterly*, 30(5), pp. 1045–1067 http://www.tandfonline.com/doi/pdf/10.1080/01436590902959339  
Grant, G. G. (working paper) The paradoxical relationship between technology and development: the case of information and communication technologies. ([on CuLearn](http://www.tandfonline.com/doi/pdf/10.1080/02681101.2010.3687793))  
Dr. Tim Unwin, ICT4D: In W hose Interests? [http://www.youtube.com/watch?v=o_MJU0VcRWo](http://www.youtube.com/watch?v=o_MJU0VcRWo)  
Top 7 Reasons Why Most ICT4D Projects Fail - Dr Clint Rogers [http://www.youtube.com/watch?v=wLVLh0L7qJ0](http://www.youtube.com/watch?v=wLVLh0L7qJ0)  
Ten Myths of ICT for International Development Speaker/Performer: Kentaro Toyama, Researcher, School of Information, UC Berkeley [http://www.youtube.com/watch?v=E_mTwm5m8DM](http://www.youtube.com/watch?v=E_mTwm5m8DM) |
| Mar 10 | ICT Infrastructure: The Internet, mobile phones, and economic development | The session will provide an overview of the access and connectivity context in developing countries. We will look particularly at mobile phones and how they are impacting the connectivity and access challenges faced by people and organizations in developing country settings. | Madon, S. (2000) The Internet and socio-economic development: exploring the interaction, *Information Technology and People*, 13(2), pp. 85-101.  
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<td>March 24</td>
<td>ICT Applications and Development: ICTs in Education</td>
<td>In this session we will explore the use of ICTs in education and its role in achieving development outcomes.</td>
<td>Fajebe, A. A., Best, M. L., and Smyth, T. N. (2013) Is the one laptop per child enough? Viewpoints from classroom teachers in Rwanda, <em>Information Technology &amp; International</em>, 9(3), Fall, 29-42.</td>
<td>Raj Dhingra - Can Technology Change Education? <a href="http://www.youtube.com/watch?v=l0s_M6xKxNc">http://www.youtube.com/watch?v=l0s_M6xKxNc</a></td>
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<td></td>
<td>Group C</td>
<td>There is great optimism that ICTs will be transformative for the education sector in general and will be tremendous asset in bringing education to the underserved in developing regions, particularly for those in rural and remote locations. However, ICTs are not magic bullets and must be adopted and integrated into teaching and learning to be effective.</td>
<td>Ale, K. and Chib, A. (2011) Community factors in technology adoption in primary education: perspectives from rural India, <em>Information Technology &amp; International Development</em>, 7(4), Winter, 53-68.</td>
<td>UNESCO ICT Competency Framework for Teachers (2011) <a href="http://unesdoc.unesco.org/images/0021/002134/213475E.pdf">http://unesdoc.unesco.org/images/0021/002134/213475E.pdf</a></td>
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<td>April 7(may have to be adjusted)</td>
<td>Emerging Issues: Open Development</td>
<td>In this class we will discuss the emergence of new “open” forms of social organization that are challenging traditional ways of</td>
<td>Reilly, K., Smith, M.L. (Forthcoming) The Emergence of Open Development in a Network Society, <em>Open Development: technological, organizational, and social innovations in</em> Escobar, Arturo. (2009) Other Worlds are (Already) Possible: Self-Organization, Complexity, and Post-Capitalist Cultures, The World Social Forum: Challenging Empires (eds. Jai Sen and Peter Waterman) Black Rose Books</td>
<td></td>
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<td>doing things, including engaging in development</td>
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<td><em>International Development</em> (eds. Smith &amp; Reilly) <em>(to be supplied by Professor)</em></td>
<td><a href="http://www.choike.org/documentos/wsf_s506_escobar.pdf">http://www.choike.org/documentos/wsf_s506_escobar.pdf</a></td>
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<tr>
<td>April 14</td>
<td>Paper Submission Due</td>
<td></td>
<td></td>
<td><a href="http://fora.tv/2011/06/07/That_Giant_Sifting_Sound_A_Short_History_of_Big_Data#What_Drives_the_Global_Growth_of_Information">http://fora.tv/2011/06/07/That_Giant_Sifting_Sound_A_Short_History_of_Big_Data#What_Drives_the_Global_Growth_of_Information</a></td>
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*The schedule may be modified to remove or add material, with ample notification given to the students.*
IMPORTANT ADDITIONAL INFORMATION

Course Sharing Websites

Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Policy on Mobile Devices

The use of mobile devices IS NOT PERMITTED in this class. It is disruptive to the instructor and class members. If you carry such a device to class, please make sure it is turned off. If an emergency situation requires you to keep it turned on, please discuss this with your instructor prior to class.

Group Work

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, followership and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your instructor may assign one or more group tasks/assignments/projects in this course.

Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

Person with Disabilities

Students with disabilities requiring academic accommodations in this course are encouraged to contact a co-ordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with the PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the first in-class test or ITV midterm exam. This is necessary in order to ensure sufficient time to make the necessary arrangements. Please refer to http://www.carleton.ca/pmc/ for all PMC information.

Religious Observance

Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton’s Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.
Pregnancy

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another’s ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at http://www2.carleton.ca/sasc/advisingcentre/academic-integrity/.

Important Dates and Deadlines – Winter 2016

Sessions:
- Fall term: September 2, 2015 – December 7, 2015
- Winter term: January 6, 2016 – April 8, 2016
- Fall/winter: September 2, 2015 – April 8, 2016

January 4
University reopens

January 6
Winter-term classes begin.

January 19
Last day for registration for winter term courses.
Last day to change courses or sections (including auditing) for winter term courses.
Students who have not deposited (via automated upload) the final copy of their thesis to the office of the Faculty of Graduate and Postdoctoral Affairs must register.

January 31
Last day for a fee adjustment when withdrawing from Winter term courses or the Winter portion of two-term courses. Withdrawals after this date will create no financial change to Winter term fees (financial withdrawal).

February 12
April examination schedule available online.

February 12-20
Fall-term deferred examinations will be held.
February 15
Statutory holiday, University closed.
February 15-19
Winter Break. Classes are suspended.
March 1
Last day for UHIP refund applications for International Students who will be graduating this academic year.
Last day for receipt of applications from potential spring (June) graduates.
March 6
Last day to submit Formal Examination Accommodation Forms to the Paul Menton Centre for Students with Disabilities for April examinations.
March 24
Last day to pay any remaining balance on your Student Account to avoid a hold on access to marks through Carleton Central and the release of transcripts and other official documents. An account balance may delay Summer 2016 course selection.
Last day for tests or examinations in courses below the 4000-level before the final examination period (see Examination Regulations in the Academic Regulations of the University section of this Calendar).
March 25
Statutory holiday, University closed.
April 1, 2016
Last day for receipt of applications for admission to an undergraduate program for the fall/winter session, from candidates whose documents originate outside Canada or the United States, except for applications due February 1 or March 1.
April 8
Winter term ends.
Last day of fall/winter and winter-term classes.
Last day for academic withdrawal from fall/winter and winter term courses.
Last day for handing in term work and the last day that can be specified by a course instructor as a due date for term work for fall/winter and winter-term courses.
April 9-10
No classes or examinations take place
April 11-23
Final examinations in winter term and fall/winter courses may be held. Examinations are normally held all 7 days of the week.
April 15, 2016
Winter Co-op Work Term Reports are due.
April 23, 2016
All take home examinations are due on this day.