

## **LIBR 548H: Introduction to Community Informatics**

### **SUMMER COURSE SYLLABUS**

Program: Master of Library and Information Studies

Year: 2016

Summer Session, Term 2 (July – August)

Course Schedule: Online

Instructor: Michael Gurstein

Phone: 604-602-0624

Office Location: Online

Office Hours: by appointment

E-mail Address: gurstein@gmail.com

Connect: <http://connect.ubc.ca>

Course Goal: The goal of this course is to provide students with an introduction to Community Informatics and the use of Information and Communications Technologies to enable and empower communities.

### **Welcome letter from the instructor**

Community Informatics, also known as community networking, electronic community networking, community-based technologies or community technology refers to an emerging set of principles and practices concerned with the use of Information and Communications Technology (ICT) for personal, social, cultural or economic development within communities; for enabling the achievement of collaboratively determined community goals; and for invigorating and empowering communities in relation to their larger social, economic, cultural and political environments.

From an academic and research perspective Community Informatics can be seen as a field of practice in applied ICT. It brings together the practices of community (and economic and social) development with insights from fields such as sociology, planning, development studies, women's studies, library and information sciences, management information systems, and management and computer sciences. Its outcomes -- community networks and community-based ICT-enabled service applications -- are of increasing interest to grassroots organizations, NGOs and civil society, governments and multi-lateral agencies, and the private sector, among others.

Self-organized community ICT initiatives spanning the range of application areas including health, social and economic development, small business, environmental management, and local governance have been emerging world-wide with the objective of harnessing ICT for developing social capital, poverty alleviation and empowerment at the local level. As well, collaborative communities enabled with ICT are helping to bridge organizational boundaries, ensuring more effective and efficient forms of collaboration in and between stakeholders from business, government, education, and civil society.

Most recently, ICT is playing a key role in enabling many types of virtual or hybrid communities. The resulting socio-technical systems however, are very complex and continuously evolving. The intricate interactions between community requirements and their enabling technologies are still ill understood. In particular, there is a huge gap between those who understand the

complexities and dynamics of communities and those information technologists who can build the technologies and systems that can catalyze and enable communities into more effective action.

Community Informatics gathers together both researchers and practitioners interested in the modeling and analysis of community ICT requirements, the design and implementation of community-based ICT and community information systems, and the evaluation of these technologies, as a way of contributing to the effective use of information systems at the community level. Some examples of topics of CI interest are community requirements modeling and analysis; technologies for enabling communities (blogs, discussion fora, portals, ...); social computing, collaborative working environments, community ontologies, community context modeling and meaning negotiation; community IS development methodologies; evaluation methods; the Pragmatic Web; mobile computing and local development; ICT for Development; public wireless applications; community planning and community technology; and locally significant broadband applications.

Welcome to an *Introduction to Community Informatics*. I'm very much looking forward to sharing my knowledge and experience in this emerging area with you and as well learning from you as you engage with CI from your own background and experience.

Probably a good way to get a fairly quick overview to CI and a bit of introduction to me, would be to take a look at this rather lengthy presentation I made a couple of years ago at UBC where I was looking to introduce some of your colleagues to CI as a possible field of study and engagement. <http://www.youtube.com/watch?v=YWpFiebFRDI>

I'm hoping that by the end of the course you will have some understanding of the role that communities can play in the use of Information and Communications Technologies (ICTs) and especially the role that ICTs can play in enabling and empowering communities both in Developed and Developing Countries.

I plan to have a (voluntary) online synchronous teleconference on Skype once a week (Wednesdays at 5.00 pm Pacific time) as a place to discuss course related matters including assignments and particularly your class projects as they develop (my Skype name is "mgurst"). I'll also be available at other times online by appointment although I tend to travel internationally quite a lot so I may not be immediately available or available at the times that might suit you best. I'll also be available via email.

Once I have all of your email addresses I'll be setting up an email list through which I'll be communicating most of the admin stuff that might be of interest during this course.

**Instructor Bio: Michael Gurstein, Ph.D.**

**Email: [gurstein@gmail.com](mailto:gurstein@gmail.com)**

Dr. Gurstein is currently Executive Director of the Centre for Community Informatics Research, Development and Training (Vancouver BC); and has been a Research Professor in the School of Management at the New Jersey Institute of Technology (Newark); and Research Professor in the Faculty of Management at the University of Quebec (Ouatouais).

A Canadian, he completed a B.A. at the University of Saskatchewan and a Ph.D. in Sociology at the University of Cambridge. From 1995 to 1999 Dr. Gurstein was the NSERC/SSHRC Associate Chair in the Management of Technological Change at the University College of Cape Breton, where he pioneered in the development of sustainable community-based technology applications.

His edited book "Community Informatics: Enabling Communities with Information and Communications Technologies" (Idea Group, 2000) provided a focal point for the development of "Community Informatics" as the discipline concerned with enabling communities with Information and Communications Technologies. Dr. Gurstein has served on the Board of the Vancouver Community Network, the British Columbia Community Networking Association, and Telecommunities Canada. He has served on the Steering Committee of the Global Telecentre Alliance, and on the High Level Panel of Advisors of the United Nation's Global Alliance for ICT for Development. He is the Founding Editor in Chief of the Journal of Community Informatics <http://ci-journal.net> and Foundation Chair of the Community Informatics Research Network. He has consulted to the governments of Canada, Australia, New Zealand, Malaysia, Nepal and Jordan and to the Ford Foundation, the UN Development Program, and the European Union among others.

His most recent co-edited book is "Connecting Canadians: Investigations in Community Informatics" Athabasca University Press (2012)

<http://www.aupress.ca/index.php/books/120193>

Additional information may be found at: [http://en.wikipedia.org/wiki/Michael\\_Gurstein](http://en.wikipedia.org/wiki/Michael_Gurstein)

His blog can be found at <http://gurstein.blogpost.com>

## Overview

The course will present Community Informatics in its larger theoretical, technical, social, economic, and policy contexts, and will link the discussion into current examples and on-going developments in the Canadian, OECD and Developing World contexts. Among the topics which will be covered are CI and Community Networking in Canada and globally, CI research and CI practice, CI and the Digital Divide, CI in Less Developed Countries, CI in the context of social networking and CI and public policy.

## Course Organization

The course is organized by weekly modules; module six (week six) will be set aside for project discussion. Each module is self-contained (one blogpage/module) and includes an introduction along with readings, a video, an exercise, a "case study" (to be prepared by one or more of you) and discussion questions. The case will be uploaded to the course blog and I'll be looking for comments on the case, linked to the questions and drawing from the readings.

Students will proceed through the modules in the specified order in the course schedule, completing readings and assignments in order to meet due dates. The course is designed so that there will be a new module for each week of the term and students will be expected to complete the readings and activities for each module by Sunday night of each week. (Note that I'm not expecting you to read all of the "references cited"--feel free to pick and choose based on your own interests in the area.)

You will complete three exercises for the first half semester due in the middle of the sixth week of the course and an additional three for the second half semester (due at the end of the last week of the course). The exercises are meant to show that you have read and understood at least some of the readings (for further information concerning these see below).

For each module, you are expected to:

- Complete 1-2 assigned readings for each module, based on your interests. Each reading is of equivalent significance and you can choose which readings are of most personal or professional interest to you
- Watch the video interview
- Participate in the online discussions
- Complete the module exercises (3 in the first half of the course and 3 in the second half of the course)

## Course Objectives

The goal of this course is to provide you with an overview and introduction to the emerging field of Community Informatics.

By the end of this course, you will be able to:

1. Apply the concepts of Community Informatics [1.1, 1.2, 1.3]
2. Compare/distinguish CI from other areas of Information Systems and Organizational use of ICTs [3.2]
3. Synthesize course information for the purpose of applying your knowledge in additional studies, research or practical activities in Community Networking or Community Informatics [4.1, 4.2]
4. Evaluate community ICT use in such areas as International Development or First Nations studies, community or social media, community librarianship or not for profit organizations [1.4, 5.3]

## Lesson Objectives

Module 1. Introduction and Definitions	<ul style="list-style-type: none"> <li>• Define a variety of terms of particular interest in Community Informatics</li> <li>• Explain the practice of Community Informatics and discuss the conceptual and theoretical frameworks behind it</li> </ul>
--	--

	<ul style="list-style-type: none"> <li>• Discuss the concept of “community” both in the broader usage and in the specific use in a CI context</li> <li>• Explain the roles and influences of Community Practice, Community Networking and Information Systems as the basis for Community Informatics</li> </ul>
Module 2. CI and Community Technologies	<ul style="list-style-type: none"> <li>• Identify Information and Communications technology (ICTs) of particular interest to communities</li> <li>• Describe applications of these technologies of particular interest to communities</li> </ul>
Module 3: Design, Development and Implementation of CI Systems	<ul style="list-style-type: none"> <li>• Describe the steps involved in designing and implementing a CI system</li> <li>• Examine CI systems from the perspectives of design, deployment, implementation and sustainability</li> </ul>
Module 4: CI Methods: Research, Practice and Evaluation	<ul style="list-style-type: none"> <li>• Describe and critically evaluate research methods of particular interest to CI</li> <li>• Discuss the relationship between research and practice in CI</li> <li>• Describe the role of evaluation in CI research</li> </ul>
Module 5: CI, Virtual Communities and Social Software	<ul style="list-style-type: none"> <li>• Describe the difference between the role and functioning of CI in virtual and physical communities</li> <li>• Describe the role of social software in supporting virtual communities</li> </ul>
Module 6: CI: Presentation of Project Proposals	
Module 7: Community Practice/Community Development, Community Learning and Social Capital Formation	<ul style="list-style-type: none"> <li>• Discuss the role of community practice and community development in relation to social capital development and ICTs</li> </ul>
Module 8: CI and the Digital Divide Discussion	<ul style="list-style-type: none"> <li>• Define and discuss the various approaches to the Digital Divide and the role of CI as a response</li> </ul>
Module 9: CI as a Development Strategy	<ul style="list-style-type: none"> <li>• Describe the role of CI in the context of economic and social development in Less Developed Countries</li> </ul>
Module 10: CI and Application Areas	<ul style="list-style-type: none"> <li>• Describe the role of CI in the implementation of a variety of community services including health, education, environmental management</li> </ul>
Module 11: CI and Public Policy	<ul style="list-style-type: none"> <li>• Discuss the history and current functioning of Canadian ICT policy in the context of CI</li> </ul>
Module 12: The Future of Community Informatics and Final Presentations	<ul style="list-style-type: none"> <li>• Discuss the possible future role for CI in the context of ubiquitous broadband and mobile implementations and application.</li> </ul>

## Requirements and Grading

### Overall Grading

<b>Assignments</b>	<b>Grade Weighting</b>	<b>Due Date</b>
Project	40%	
Mid-term (three exercises)	20%	
Final (three exercises)	20%	
Case	10%	
Discussion/Participation	10%	

### Assignments and Activities

#### Exercises

An exercise has been assigned for each class/module. They are to be no more than 1-3 pages in length unless by agreement. The learner will be required to present three exercises selected from the first 5 modules for the mid-term grade and an additional 3 exercises selected from modules 7, 8, 9, 10, and 11--grading as indicated above. Completed exercises should be submitted, by the middle of week 6 and the middle of week 13 respectively.

#### Project [competency #]

The project is to demonstrate that the learner has acquired the capacity to integrate and operationalize the concepts acquired from the discussions and readings. Ideally, the project would apply the concepts and language of Community Informatics to an analysis of a specific implementation or practical application.

It is expected that the project will have as its output a research paper with appropriate referencing, a document describing a specific application or some other written text or other output to be mutually agreed upon between the learner (or learner group) and the instructor. In addition, it is expected that each project or project group will provide an outline for comment by the instructor at the end of week 4 presenting a brief but comprehensive outline of the project.

The project will be assessed on its demonstration of an understanding of the concepts and strategies of Community Informatics, the excellence of execution of the research and its presentation, and originality in theme, content or execution. Learners will undertake individual projects or with mutual agreement, be allowed to choose their own project groups for a collaborative project. An individual (25% of overall) and a group (15% of overall) grade will be assigned to the project where appropriate. Learners will be expected to identify their

contribution to the overall project for individual assessment unless this is waived by mutual agreement.

The project may consist of the design of a specific system, an implementation process, an assessment of a specific project, or a literature based analysis of a specific area of interest to CI among other areas. The project will be in the 5000-8000 word range.

Some examples of possible projects are:

- Designing a support system for a youth multi-media development project
- A project plan for an ICT project to link Sri Lankan residents of Toronto with a Sri Lankan community to support disaster relief
- An assessment of the provincial broadband policy from the perspective of the digital divide, public use and public access
- An analysis of the possible local economic impact and opportunities for communities of the development of a community WiFi implementation
- An assessment of the role of libraries in providing ICT services to communities

### **Case [competency #]**

Each learner will be asked to prepare one brief 1-2 page document on one or another aspect of Community Informatics as applied to a specific organization or as agreed with the instructor. This case will link into a specific module and particular readings and is meant to illustrate how the more general concepts in that module and in the readings may be illustrated in specific real world contexts. The learners will be assigned a module on which to develop a case during the first week of class and will be expected to review and summarize a body of readings and/or develop some experiences in a specific area.

These presentations will provide the basis for an online discussion concerning each of the modules.

### **Discussion/Participation [competency #]**

Each learner will be expected to comment at least once during each of the module discussions but of course, may contribute more as appropriate. Participation will be assessed on the basis of cogency and significance of the argument or information presented.

### **Schedule**

<b>Week</b>	<b>Date</b>	<b>Module</b>	<b>Due</b>
Week 1		Module 1: Introduction and Definitions	
Week 2		Module 2: Community Informatics and Community Technologies	
Week 3		Module 3: Design, Development and Implementation of CI Systems	

Week 4	Module 4: CI Methods: Research, Practice and Evaluation	Send project outline to instructor for review
Week 5	Module 5: CI, Virtual Communities and Social Networking Software	
Week 6	Module 6: Peer Review of Project Proposals	First set of exercises (3 from modules 1-5) due:
Week 7	Module 7: Community Practice/Community Development, Community Learning and Social Capital Formation	
Week 8	Module 8: CI and the Digital Divide Discussion	
Week 9	Module 9: CI and "Development"	
Week 10	Module 10: CI and the Delivery of Community Based Services	
Week 11	Module 11: CI and Public Policy	
Week 12	Module 12: The Future of Community Informatics	
Week 13	Final Projects	Second set of exercises (3 from modules 7-12) due Final Projects Due