

ISQA 4000/8080
INFORMATION TECHNOLOGY FOR DEVELOPMENT

Note: Because this is a special-topics service learning course, with many variables beyond the direct control of the instructors, the syllabus may change frequently.

General

Course and instructor identification

Instructors:	Dr. Peter Wolcott	Dr. Sajda Qureshi
Office:	PKI 177E	PKI 173E
Office hours:	Anytime I'm in my office. Or, by arrangement	Anytime I'm in my office. Or, by arrangement-
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Meeting time	Monday/Wednesday 11:30-12:45
Meeting location	PKI 270 or as announced

Course description

Information Technology for Development (ITD) is the implementation and evaluation of information technology infrastructures to stimulate economic, social and human development. In this service-learning course, students will learn and apply ITD concepts for developing and adding value through IT by working with small business entrepreneurs in North Omaha. Students will evaluate micro-business technology needs, prepare business technology plans, provide training, and implement appropriate solutions, to the extent possible within a semester class.

The New Community Development Corporation (NCDC) will be our partner in this course. NCDC works with micro-business entrepreneurs through business development courses, consultation, and small grant funding. Through a grant from the eBay Foundation, NCDC is able to provide small grants for technology to micro-business entrepreneurs. Students will assist these entrepreneurs in understanding how information technology can add value to an enterprise, learning to make good technology choices, and using these technology grants effectively.

A critical aspect of IT for Development and this course in particular is learning to build relationships and communicate clearly in a cross-cultural setting. Students are likely to work with entrepreneurs who have different life experiences, beliefs, values, expectations, and technical expertise. Students will need to learn to appreciate these differences and use this understanding to develop productive relationships and contextually appropriate solutions. Client satisfaction with students' efforts will be taken into consideration when evaluating student work in the course.

The course will be conducted as a mix of lectures on topics of IT for Development and service learning, guest lectures and tours that focus on salient aspects of North Omaha and small business entrepreneurship, in-class progress reporting & discussion, and—most importantly—working directly with clients.

Course objectives

Through the service learning course, students will

1. Gain insight into the history, culture, and economy of North Omaha
2. Understand the challenges and opportunities facing micro-enterprises in North Omaha
3. Evaluate the information and technology needs of a micro-enterprise
4. Apply IT for Development principles to develop a business technology plans, provide necessary training, and implement appropriate solutions for a micro-enterprise.

Course prerequisites

Permission of the instructors.

Textbook

There is no textbook. Reading material will be handed out in class or posted on Blackboard.

Policies

Cheating

Assignments typically are individual. Although you may discuss your individual assignments with classmates (indeed, you are encouraged to do so), you must turn in work that is your own. The distinction I make is similar to that made by traditional copyright law: **A copyright is the expression of an idea (like your solution to homework) in a fixed media susceptible to perception (like a file or hard-copy). Copying of a physical (electronic) manifestation of a person's work is not permitted; sharing of ideas is. If you copy another person's work, either manually or electronically, you will receive no credit for the assignment. If you allow your work to be copied by another person, you also will receive no credit for the assignment. Two such infractions can result in a failing grade for the course.**

Late assignments

I understand that many of you have outside jobs that may involve crises, stiff deadlines, or business trips that will take away from the time you choose to devote to course work and may interfere with the specific timetable laid out below. Consequently, you will be assessed a 2% assignment grade penalty for each day an assignment is late, up to a maximum of one week. This will reward students who do get their assignments in on time, but not penalize excessively those who due to work- or family- related circumstances are unable to meet the due date. No assignments more than a week late will be accepted, since I want to be able to return graded assignments in a timely manner.

ADA notice

The Americans with Disabilities Act (ADA) requires universities to affirmatively notify students of their right to request accommodations. Accommodations are provided for

students with verified disabilities. For more information contact Services for Students with disABILITIES (SSd) in EAB 117 or 554-2872, TTY 554-3799.

Course Deliverables and Grading
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The deliverables for the semester will include.

1. A journal. Critical reflection is a vital part of service learning. It is critical reflection that provides the transformative link between the action of *servicing* and the ideas and understanding of *learning*.¹ Through reflection, the student considers what has occurred, what it means, and how one should respond. Students are expected to reflect on their experiences following every class and every meeting with the client. Journals will be collected and graded periodically throughout the semester.
2. A Business Technology Plan.
3. An individualized IT-based solution to a pressing problem or opportunity faced by a microenterprise
4. Project report and presentation.

Grading

Your grade will be computed as follows:

GRADE COMPONENT	POINTS POSSIBLE
Keep a journal	100
Business Technology Plan	300
IT-based solution	300
Project report & presentation	300
TOTAL	1000

Grade scale

Grading will be done on a curve, if necessary, but typically:

POINTS	LETTER GRADE
960-1000	A+
920-969	A
890-919	A-
860-889	B+
820-859	B
790-819	B-
760-789	C+
720-759	C
690-719	C-

¹ Eyler, J., Giles, D.E., Jr. and Schmiede, A. *A Practitioner's Guide to Reflections in Service Learning: Student Voices & Reflections*, Vanderbilt University, Nashville, TN, 1996, p. 14.

660-689	D+
620-659	D
590-619	D-
<590	F

Tentative Course Outline & Schedule²

DATE	TOPIC	READINGS	DELIVERABLES
27 August	Introduction		
29 August	What is Information Technology for Development?	(Qureshi 2005; Steinberg 2003; Warschauer 2003)	
September 3 Labor Day Holiday			
5 September	Visit to NCDC		
10 September	What is Information Technology for Development?	(Qureshi 2005; Steinberg 2003; Warschauer 2003)	
12, 17 September	Applications of IT for Development Matching of students with microenterprises	(ICT & Development 2003; Wolcott et al. 2007)	
19, 24 September	North Omaha		
24-26 September	Microenterprises and Entrepreneurship	(Grosh et al. 1996; Honig 1998; Lichtenstein et al. 2006; Schreiner et al. 2003)	Journal v.1
1,3 October	Information Systems in Micro Enterprises	(Duncombe et al. 2002; Levy et al. 2002; Riemenschneider et al. 2003)	
8-10 October	Technology Assimilation, and Adoption	(From online to helpline 2006; Furuholt et al. 2006)	
15-17 October	Measuring Return on Investment and the Impact of IT on Development	(Betts 2003; Brynjolfsson et al. 1996; Wettemann 2007)	
October 22 Fall Break			
24 October	Business technology plan development		
29, 31 October	Appropriate technology implementations		Journal v. 2
5, 7 November	Discussion of business technology plans		Business Technology Plan v. 1

² The second half of the course will primarily involve students working with community partners. In-class meetings will focus on student experiences. Consequently, detailed planning for the second half of the semester will take place once we see how matters develop during the first half. Due dates are also subject to change.

12, 14 November	Discussion of business technology plans		
19 November	To be determined		
Thanks giving			
26, 28 November	To be determined		
3, 5 December	Student presentations		Final journal, Presentation, Final business technology plan

Reading List

- "ICT & Development: Enabling the Information Society," The World Bank Group, Global Information & Communication Technologies Department, 2003, p. 83.
- "From online to helpline; Face value," *The Economist* (380:8489) 2006, p. 58, <http://proquest.umi.com/pqdweb?did=1090457801&Fmt=7&clientId=25513&RQT=309&VName=PQD>
- Betts, M. "Special Report: Do the Math! An ROI Guide," *Computerworld*, Feb. 17, 2003, http://www.computerworld.com/special_report/000/000/100/special_report_000000180_primary_article.jsp.
- Brynjolfsson, E., and Yang, S. "Information Technology and Productivity: A Review of the Literature," *Advances in Computers* (43) 1996, pp. 179-214
- Duncombe, R., and Heeks, R. "Enterprise Across the Digital Divide: Information Systems and Rural Microenterprise in Botswana," *Journal of International Development* (14:1), January 2002, pp. 61-74
- Furuholt, B., and Ørvik, T.U. "Implementation of Information Technology in Africa: Understanding and Explaining the Results of Ten Years of Implementation Effort in a Tanzanian Organization," *Information Technology for Development* (12:1) 2006, pp. 45-62
- Grosh, B., and Somolekae, G. "Mighty oaks from little acorns: Can microenterprise serve as the seedbed of industrialization?," *World Development* (24:12), Dec 1996, pp. 1879-1890, <Go to ISI>://A1996WA53500006.
- Honig, B. "What determines success? Examining the human, financial, and social capital of Jamaican microentrepreneurs," *Journal of Business Venturing* (13:5), Sep 1998, pp. 371-394, <Go to ISI>://000074739200003.
- Levy, M., Powell, P., and Yetton, P. "The dynamics of SME information systems," *Small Business Economics* (19:4), Dec 2002, pp. 341-354
- Lichtenstein, G.A., and Lyons, T.S. "Managing the Community's Pipeline of Entrepreneurs and Enterprises: A New Way of Thinking About Business Assets," *Economic Development Quarterly* (20:4) 2006, pp. 377-386

- Qureshi, S. "How Does Information Technology Effect Development? Integrating Theory and Practice into a Process Model," Proceedings of the Eleventh Americas Conference on Information Systems (AMCIS), Association for Information Systems, Omaha, NE, 2005.
- Riemenschneider, C.K., Harrison, D.A., and Mykytyn, P.P. "Understanding it adoption decisions in small business: integrating current theories," *Information & Management* (40:4), Mar 2003, pp. 269-285
- Schreiner, M., and Woller, G. "Microenterprise development programs in the United States and in the developing world," *World Development* (31:9), Sep 2003, pp. 1567-1580, <Go to ISI>://000184963100006.
- Steinberg, J. "Information technology & development beyond "either/or"," *The Brookings Review* (21:2) 2003, p. 45,
<http://proquest.umi.com/pqdweb?did=324951891&Fmt=7&clientId=25513&RQT=309&VName=PQD>
- Warschauer, M. "Demystifying the digital divide," *Scientific American* (289:2) 2003, p. 42,
<http://proquest.umi.com/pqdweb?did=374317501&Fmt=7&clientId=25513&RQT=309&VName=PQD>
- Wetteman, R. "The Value of IT - Business Alignment," Computerworld IT Executive Summit IT/Business Alignment, 2007,
<http://www.itexecutivesummit.com/documents/Compuware%20Chicago%20-%20Rebecca%20Wetteman%20Presentation.ppt>.
- Wolcott, P., Qureshi, S., and Kamal, M. "An Information Technology Therapy Approach to Microenterprise Adoption of ICTs," Proceedings of the Thirteenth Americas Conference on Information Systems (AMCIS), Association for Information Systems, Keystone, CO, 2007.