Subject Description Form

Subject Code	COMP3911					
Subject Title	Service-Learning and Civic Engagement in the Information Age					
Credit Value	3					
Level	3					
Pre-requisite/ Co- requisite/ Exclusion	Nil					
Objectives	 Introduce the concept and practice of learning through community service to our students Acquaint students with significant issues of social needs related to the information age, such as the concept of the information divide Facilitate computing students to apply their computing and technology skills to address societal needs Enhance students' generic competencies of innovative problem solving, communication and teamwork Nurture students' sense of social awareness, empathy, responsibility and engagement. 					
Intended Learning Outcomes	 Upon completion of subject, students will be able to: a. Articulate the role of computing technology in social contexts and linkage to the needs of the underprivileged b. Demonstrate awareness of the cause, impact and potential solutions of the information and digital divide c. Analyze complex issues in the service setting and design, implement and apply appropriate technological solutions to meet the needs of the target recipients d. Work effectively in teams to solve problems encountered in planning and delivering the service e. Communicate effectively with clients, partners and/or other stakeholders f. Demonstrate empathy for people in need and a sense of civic responsibility, especially pertaining to the use, deployment and impact of technology g. Reflect on their role and responsibilities, both as a Computing professional and as a responsible citizen. 					
Subject Synopsis/ Indicative Syllabus	Concept and Practice of Service-Learning: Principles, concepts and myths of service-learning					

- Benefits of service-learning to students and the community
- Ethical issues in service-learning
- Proper attitudes and behaviours in service delivery
- Reflection as a tool for learning
- 2. Discipline-specific Concepts, Issues and Skills
 - The digital divide. Cause and impact of the digital divide on society: economical, cultural, political. Possible global and/or local solutions to the digital divide.
 - Potential ethical, environmental and societal impacts of technology. Possible harm created by technology. Ethical and moral concerns raised by technology. Proper use of technology. Appropriate and sustainable technology.
 - Possible solutions to societal needs through technology.
 Potential factors impacting the effective use of technology by underprivileged communities. Usability, interaction and accessible technology.
- 3. Project-Specific Concepts, Issues and Skills
 - Understanding the background and needs of the identified target group in the community
 - Health, safety, privacy, moral and ethical concerns and other issues relevant to the service project and beneficiaries
 - Project planning and development skills (e.g. human psychology and interaction, game programming, hardware development, cost, manpower and other resource estimation, budgeting, etc.) relevant to the projects.

Teaching/Learning Methodology

1. e-Learning Module

The e-learning module is developed and delivered by the Service-Learning and Leadership Office at PolyU, consisting of readings, exercises and assessments that are designed to introduce students to the basic concept and practice of service-learning.

Students are required to successfully complete the e-learning module within the first four weeks of the semester in which they are taking the subject.

2. Discipline-Specific Lectures, Tutorials, Seminars and/or Workshops

These activities will cover computing-related topics such as the information and digital divide and its impact, appropriate technology, and/or information and digital ethics. They will also cover specific computing skills that may be needed by the students to carry out their service-learning projects. There will be opportunities for small group

discussions, assignments, and presentations – to explore these issues in greater depth.

3. Project-Specific Seminars, Tutorials and/or Workshops

The project-specific seminars, tutorials and/or workshops are designed to: (a) develop students' understanding of the targeted clients/ underprivileged community, as well as other issues relating to the service-learning project, (b) provide training for students in generic skills in planning and delivering the service project. Guest experts and speakers will be invited to contribute to some of these sessions as appropriate. Where possible, a hands-on interactive format will be used.

Students are required to attend <u>all</u> of the discipline-specific and project-specific lectures, seminars and workshops and successfully complete <u>all</u> of the required assignments/learning tasks prior to participation in the service-learning project.

4. Service-Learning Project

The service-learning projects are designed to develop students' generic competencies of innovative problem-solving, teamwork and communication, and enhance students' sense of social awareness, responsibilities and engagement.

Projects may be either local or offshore. The projects will emphasize *hands-on* tasks. They will involve team as well as individual work. Students will be encouraged to research on specific problems. They will also be challenged to design and implement solutions, applying their knowledge in information technology to solving social problems.

Examples of projects include:

- *STEM DAY Projects*. In these projects, students will plan, coordinate, prepare the STEM materials and provide a STEM Day experience to underprivileged communities, such as disabled children, the elderly, or at-risk youths.
- Development and Infrastructure Projects. In these projects, students
 will design and develop an IT solution for an underprivileged
 community or an NGO, such as designing VR and AR games to
 facilitate physical and mental therapy for children with severe
 disabilities or to facilitate mental therapy for elders with dementia.

The projects will involve around 40 hours of frontline service. Some projects (such as some particularly challenging or off-shore projects) may necessitate specific selection requirements on participating students. The teaching team will make the final decisions on project allocation, but efforts will be made to accommodate student preferences on their choice of project. For overseas projects, students may also be asked to shoulder a portion of their incurred costs.

Overseas projects will involve approximately one week of intensive frontline service, while local projects may be conducted during evenings and weekends.

5. Review Sessions, Reflective Journals and Report

Students will be required to write reflective journals and reports both <u>during</u> and <u>after</u> the service-learning project to demonstrate their ability to: (a) link their service-learning experiences with the academic focus/discipline-specific content of the subject, (b) reflect on their service-learning experience to identify their learning gains as well as areas for future improvements, (c) reflect on their roles and social responsibilities. Class presentations of their reflections and activities will also be required.

To guide students in using reflection as a tool for learning, and to assess their ability in achieving the above learning objectives, reflection and review sessions will also be held both <u>during</u> and <u>after</u> the service-learning project.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/ tasks	% weighting	Intended subject learning outcomes to be assessed						
methods/ tasks		a	b	c	d	e	f	g
e-Learning Module (individual)	Pass/fail*							>
Attitude, discipline and contribution during preparation (individual)	10%			✓	√			
Plans/proposals for service (group)	20%		✓	✓	✓			
Performance in rendering service (individual & group)	40%			✓	✓	>	✓	
Reflective journal/report (individual)	30%	✓	✓	✓			✓	✓
Total	100%							

^{*}Failure to complete before the deadline will incur a grade penalty

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The e-Learning Module will include <u>assignments and learning tasks</u> that are designed to introduce the concept and practice of service-learning to students, and to help them to begin to reflect on their role and responsibility as a computing professional and citizen (ILO g).

Students will be asked to write <u>proposals or plans</u> for the service projects as preparation for service. These proposals will demonstrate their awareness of potential solutions, as well as their ability to apply classroom-learned skills to deal with complex issues and problems in the service settings (ILO b and c), and their ability to function effectively as a team to solve complex problems (ILO d).

The students' attitude, discipline and contribution during the preparation will demonstrate their ability to work effectively in teams (ILO d), as well as their ability to implement and apply technology to meet the needs of their target recipients (ILO c).

The students' <u>attitude</u> and <u>performance</u> in the rendering of service, their degree of <u>engagement</u> with the service recipients, their <u>collaboration</u> with other students, and <u>interactions</u> with the service recipients and/or collaborating NGOs are obviously indicators of their ability to communicate effectively with clients and stakeholders (ILO e), their sense of civic responsibility, professional ethics and their empathy for people in need (ILO f), and their ability to work collaboratively to apply their knowledge and skills to deal with real problems in the service setting (ILO c and d).

Students' reflective journals and report will testify to the students' reflection on their learning experience, and the breadth and depth of their learning. This assesses their ability to link service-learning and the academic content of the subject (ILO a), their awareness of the impact of and solutions to the digital divide (ILO b), their ability to apply their knowledge to the service project (ILO c), their empathy for the less fortunate people in the society (ILO f), and their ability to reflect on their role and responsibilities in the society (ILO g).

The class discussions and assignments are designed to help the students to learn and to gage the students' understanding of the issues discussed. The students will be asked to write proposals for the projects, as preparation for service as well as assessment of their understanding of social needs.

The students' attitude in the rendering of service, their degree of engagement with service recipients, their collaboration with other students, and relationship with collaborating NGOs are obviously indicators of their sense of civic responsibility.

	Students' reflective journals on their experience, and reflective term reports testify to the students' reflection on their learning experience, and the breadth and depth of their learning.					
sStudent study effort expected	E-Learning Module	10 hours				
сърсски	Class Contact:					
	Discipline-related Lectures, Tutorials, Seminars and/or Workshops	12 hours				
	Project-Specific Seminars, Tutorials and/or Workshops	13 hours				
	Reflection and review tutorials and sessions	10 hours				
	Other student study effort:					
	Planning and preparation of project	25 hours				
	Rendering of service	40 hours				
	Reflection and review	25 hours				
	Total student study effort	135 hours				
Reading list and references	 Rethinking the Digital Divide, The MIT Press, A. Barbara Jacoby and Associates, Civic Engagem Education, Jossey-Bass, 2009. Cathryn Berger Kaye, The Complete Guide to S. Free Spirit Publishing, 2004. Anne Colby, Thomas Ehrich, Elizabeth Beaumo Stephens, Educating Citizens – Preparing Amer Undergraduates for Lives of Moral and Civic Rodossey-Bass, 2003. Christine M. Cress, Peter J. Collier, Vicki L. Re Associates, Learning Through Serving – A Studfor Service-Learning Across the Disciplines, Sta 2005. Dan Butin, Service-Learning in Theory and Practices. 	 Rethinking the Digital Divide, The MIT Press, 2003. Barbara Jacoby and Associates, Civic Engagement in Higher Education, Jossey-Bass, 2009. Cathryn Berger Kaye, The Complete Guide to Service Learning, Free Spirit Publishing, 2004. Anne Colby, Thomas Ehrich, Elizabeth Beaumont, Jason Stephens, Educating Citizens – Preparing America's Undergraduates for Lives of Moral and Civic Responsibility, Jossey-Bass, 2003. Christine M. Cress, Peter J. Collier, Vicki L. Reitenauer and Associates, Learning Through Serving – A Student Guidebook for Service-Learning Across the Disciplines, Sterling, Virginia, 2005. Dan Butin, Service-Learning in Theory and Practice – The Future of Community Engagement in Higher Education, 				