

### Subject Description Form

<b>Subject Code</b>	EIE2S02
<b>Subject Title</b>	Promoting Digital Literacy in Developing Societies
<b>Credit Value</b>	3
<b>Level</b>	2
<b>Pre-requisite/ Co-requisite/ Exclusion</b>	Nil
<b>Objectives</b>	<p><b>The objectives of this subject are to:</b></p> <ol style="list-style-type: none"> <li>1. Introduce to students the concept and practice of service-learning</li> <li>2. Raise students' awareness of digital literacy issues in developing societies</li> <li>3. Help students develop the knowledge, language, and skills needed to plan, organise and deliver effective I.T. workshop in different contexts</li> <li>4. Provide students with opportunities to address challenges in preparing and delivering presentations and workshop in realistic situations</li> <li>5. Enhance students' generic competencies of innovative problem solving, communication and teamwork</li> <li>6. Nurture students' sense of social awareness, responsibility and engagement</li> <li>7. Promote the awareness of the importance of digital literacy to the local students in the community</li> </ol>
<b>Intended Learning Outcomes</b>	<p><b>Upon completion of the subject, students will be able to:</b></p> <ol style="list-style-type: none"> <li>1. Link their service-learning activities and experiences to demonstrate an awareness of the importance of digital literacy</li> <li>2. Apply IT knowledge and skills to design and plan workshops that effectively teach IT knowledge and skills to the target community</li> <li>3. Apply classroom management knowledge and teamwork skills to deliver the IT workshops and solve problems encountered during the process of the service</li> <li>4. Communicate effectively with clients and/or other stakeholders</li> <li>5. Demonstrate empathy for people in need of digital literacy and a sense of civic responsibility</li> <li>6. Reflect on their role and responsibilities both as a professional in their chosen discipline and/or as a responsible digital citizen</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	<p><b>The topics in the course syllabus cover three major areas:</b></p> <ol style="list-style-type: none"> <li>1. Concept and Practice of Service-Learning: <ul style="list-style-type: none"> <li>• Principles, concepts and myths of service-learning</li> <li>• Benefits of service-learning to students, the university and the community</li> <li>• Ethical issues in service-learning</li> <li>• Social responsibilities of global citizens as intellectuals and professionals</li> <li>• Proper attitudes and behaviours in service delivery</li> <li>• Developing a service project proposal/plan</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>• Effective teamwork and problem-solving skills in service-learning projects</li> <li>• Reflection as a tool for learning</li> </ul> <p>2. Discipline-Specific Concepts, Issues and Skills</p> <ul style="list-style-type: none"> <li>• Introduction to digital literacy: what is digital literacy, digital citizenship, responsible use of digital resources</li> <li>• Digital literacy and social development: digital literacy in education, digital literacy issues in developing societies</li> <li>• Acquiring basic I.T. knowledge: Lectures and labs for basic I.T. skills relevant to the service</li> </ul> <p>3. Project-Specific Concepts, Issues and Skills</p> <ul style="list-style-type: none"> <li>• Understanding the historical, cultural, and socio-political background of the service recipients</li> <li>• Health, safety and other issues relevant to the service project</li> <li>• Moral and ethical concerns specific to the project and beneficiaries</li> <li>• Teaching I.T. workshops for the service recipients <ul style="list-style-type: none"> <li>○ Designing workshops and activities</li> <li>○ Developing teaching proposal and materials</li> <li>○ Engaging and interacting with the audience</li> </ul> </li> <li>• Teaching skills and classroom management</li> <li>• Presentation for the teaching proposal</li> <li>• Demonstration runs for the service</li> </ul>
<p><b>Teaching/Learning Methodology</b></p>	<p>This subject is designed as a two-semester subject (semester 2+ semester 3). It comprises lectures, workshops and a teaching service component.</p> <p>1. e-Learning Module on service-learning</p> <p>The e-learning module is developed and delivered by the Service-Learning and Leadership Office (SLLO) at PolyU; it consists of readings, exercises and assessments that are designed to introduce students to the basic concept and practice of service-learning. Students are required to complete the e-learning module within the first four weeks of the semester in which they are taking the subject.</p> <p>2. Discipline-specific Concepts, Issues and Skills</p> <p>The basic teaching contents of this subject will be presented with the aid of lecture notes, videos and other teaching tools. For labs, students will participate in small-group projects to explore the basic I.T. knowledge in daily life. Students are expected to study reference materials from the library or other sources (e.g. newspaper and magazine clippings, and information available on the Internet) distributed in class. Guest speakers, such as service clients, might be invited to deliver seminars on current digital literacy issues of the community in the form of teleconferencing or videos. Students are required to attend all of the discipline-specific lectures, seminars and labs, and complete all of the required quiz(zes)/learning tasks prior to participation in the service-learning trip. The lectures and labs are to equip students with the discipline-specific knowledge and I.T. skills required for planning and conducting the I.T. workshop for the service.</p> <p>3. Project-specific Concepts, Issues and Skills</p>

Students are responsible for developing their teaching proposals and relevant teaching materials before the service and presenting them in class. They will discuss and develop their teaching proposals and materials with the subject lecturers. Feedback will be provided accordingly.

To better prepare students for the effective delivery of the I.T. workshops, lessons on teaching skills, classroom management, proposal and teaching materials development will be provided.

#### 4. Service Delivery

The service delivery will take place in the third semester. Students will attend an intensive off-shore trip lasting 10 to 14 days in summer to conduct workshops to service clients. For overseas projects, students may also be asked to shoulder a portion of their incurred costs.

Prior to the service trip, the students are expected to attend the mandatory I.T. workshops coached by the Instructors and prepare their own teaching materials with demonstration.

During the service trip, the students are expected to spend 10 to 14 days overseas. Students will be divided into teams to teach different I.T. workshops for different groups of service recipients such as local students or orphans. Example topics of the I.T. workshops include but not limited to Scratch, Raspberry Pi, mobile App and/or website development. The service will focus on one or two topic(s). The service recipients will learn and practice different I.T. skills throughout the service period. The number of hours for direct rendering of the service is about 40.

While the students are teaching I.T. workshops on-site, their performance would be observed by the teachers. When they encounter any difficulties during service, the teachers would provide advice and help them find out solutions instantly.

As part of the service, students will facilitate other out-of-classroom activities, such as local home visit, historical sites, and other cultural activities.

#### 5. Reflection

Students will be required to write reflective journals and reports 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.

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 during and after the service-learning project. Experts and facilitators from outside the subject-offering department (e.g. SLLO, NGOs) may be invited to contribute to some of these sessions as appropriate.

**Assessment Methods in Alignment with Intended Learning Outcomes**

Students' performance in this subject will be assessed using a letter-grading system in accordance with the University's convention from grade F (failure) to A+. The relative weighting of the different assessment components are as follows:

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		1	2	3	4	5	6
1. e-Learning module on service-learning	Pass/Fail	√				√	√
2. Lab work/quiz(zes)	20%		√	√			
3. Group Presentation / Proposal / Demonstration	15%		√	√			
4. Performance in rendering service	35%	√	√	√	√	√	√
5. Reflective journal	20%	√	√	√	√	√	√
6. Final group presentation and report	10%	√	√	√	√	√	√
Total	100 %						

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

1. E-Learning Module on service-learning

The e-Learning Module will include assignments and learning tasks that are designed to assess students' ability to link service-learning with the academic content of the subject (ILO 1), their empathy for the underprivileged community (ILO 5) as well as their understanding of their role and responsibilities in society (ILO 6).

2. Lab work/quiz(zes)

Knowledge-check quiz(zes) are used to assess the academic content they have learnt. The lab work gives a hands-on I.T. experience for students to work as teams. (ILO 2, 3).

3. Group Presentation/Proposal/Demonstration

Students are required to design the teaching proposal and materials for workshops with presentations for target service recipients as preparation for service delivery. They will need to present the materials and conduct a demonstration run to the subject lecturers before the service (ILO 2). The demonstration run will show students' ability to work effectively in teams to solve problems in planning for the service (ILO 3) and to apply their discipline-specific as well as other knowledge and skills to deal with issues and problems in the service settings (ILO 2).

	<p>4. Performance in rendering service</p> <p>Students are required to conduct workshops at the service location. Students' attitude and performance in the rendering of service, their degree of engagement with the service recipients, and their collaboration with other students are indicators of their ability to communicate effectively with clients and stakeholders (ILO 4), their sense of civic responsibility, professional ethics and their empathy for people in need (ILOs 5 and 6), and their ability to work collaboratively to apply their knowledge and skills to deal with real problems in the service setting (ILO 2). Also, at the end of the service, students would need to give a group presentation to reflect on what they have learnt (ILOs 1, 2, 3, 4, 5, 6).</p> <p>While the students are teaching I.T. workshops on-site, their performance would be observed by the teachers. Their performance in the service component will be assessed by the teachers' observation. The performance criteria may include the accomplishment of given tasks for the service, the commitment of assigned roles during the trip, co-operation with their peers, on-site preparation, etc.</p> <p>5. Reflective journal</p> <p>Students need to submit individual reflective writing after the completion of each service. The reflective writing expects students to reflect on their service-learning experiences (ILO 1), project development experiences (ILO 2), group collaboration (ILO 3), communication with the service recipients (ILO 4), empathy for the less fortunate people in the society (ILO 5), and their role and responsibilities in the society (ILO 6).</p> <p>6. Final group presentation and report</p> <p>Students are required to submit a group report and give a group presentation after the completion of all workshops. The presentation and report assess their ability to link service-learning and the academic content of the subject (ILO 1), their ability to evaluate their performance at the service project (ILO 2), their ability to solve problems during service (ILO 3), the effectiveness of their communication with the service recipients (ILO 4), their empathy for the less fortunate people in the society (ILO 5), and their ability to reflect on their role and responsibilities in the society (ILO 6).</p>	
<b>Student Study Effort Expected</b>	E-learning Module	10 Hours
	<b>Class contact:</b>	
	<ul style="list-style-type: none"> <li>▪ Lectures, Tutorials, Workshops, Seminars and/or Presentations</li> </ul>	30 Hours
	<b>Other student study effort:</b>	
	<ul style="list-style-type: none"> <li>▪ Readings, self-study, and planning and preparation for the service project</li> </ul>	35 Hours
	<ul style="list-style-type: none"> <li>▪ Direct rendering of service</li> </ul>	40 Hours
	<ul style="list-style-type: none"> <li>▪ Reflection and review</li> </ul>	20 Hours
	<b>Total student study effort</b>	<b>135 Hours</b>

<b>Reading List and References</b>	<ol style="list-style-type: none"><li>1. Katharine Reedy and Jo Parker, Digital Literacy Unpacked, Facet Publishing, 2018.</li><li>2. Kurniawan, Agus (2019) Raspbian OS Programming with the Raspberry Pi : IoT Projects with Wolfram, Mathematica, and Scratch. Berkeley, CA: Apress</li><li>3. LEAD Project (2014) Super scratch programming adventure! : learn to program by making cool games. San Francisco, CA : No Starch Press</li><li>4. Derek Walter and Mark Sherman. 2014. Learning MIT App Inventor: A Hands-On Guide to Building Your Own Android Apps (1st ed.). Addison-Wesley Professional.</li></ol>
<b>Last Updated</b>	August 2020
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