Subject Description Form

Subject Code	**COMP2A01**
Subject Title	**Whose Data is it Anyway? Information and Internet Ethics, Privacy and Security**
Credit Value	**3**
Level	**2**
Medium of Instruction	English
Pre-requisite and/or Exclusion(s)	Nil
Objectives	Specific objectives of the subject: This subject is intended for all PolyU students with or without any technical background in Computing or IT. The objective of the subject is to give students an overview of the issues surrounding data and information creation, organization, dissemination and use, and the associated ethical and moral issues, including those related to ownership, access, privacy, security and community. Students will study and consider ethical dilemmas, the uses and abuses of information, tension and tradeoffs between information privacy, security and freedom of speech, and the meaning of social responsibility in the global information security, including the concepts of information justice and human rights.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. Identify and understand common issues associated with the acquisition and use of information, including copyright protection, intellectual freedom, accountability and security; b. Understand the technological challenges relevant to information protection and privacy and the implications and societal consequences of technology abuse; c. Understand the different issues and approaches to ethical dilemmas in using information and information and communications technologies; d. Apply different ethical analysis approaches to evaluate dilemmas and practice problem analysis and decision-making for ethically challenging scenarios. Relationship between the learning outcomes with the following three essential features: Literacy, Higher order thinking, and Life-long learning Literacy: This subject will require students to do some self-study as well as to both read relevant materials and to write critically about different issues in their own words and with their own thinking. Students will be required to study ethically challenging scenarios, and to intelligibly formulate and present problem analyses and solutions from different points of view. Higher-Order Thinking: Learning outcomes (c) and (d) are designed to teach and to train students' higher-order thinking and problem-solving skills. Students will be required to extend basic ethical concepts to analyzing and solving complex and challenging scenarios. They will be required to research, contrast, present and defend controversial and conflicting points of view. Life-Long Learning: As technology progresses and becomes ever more intrusive and ubiquitous, the

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<tr><td></td><td>challenges associated with the ethical use of information, and the personal risks to one's own information will become more challenging and complex. The skills learned in this module will enable the student to handle these challenges effectively.</td></tr>
<tr><td>Subject Synopsis/ Indicative Syllabus</td><td>1. Ethical Traditions and Methods. Morals, Morality, Ethics, and Etiquette. Personal Integrity, Professional Ethics and Social Responsibility.

2. Philosophy of Information and Technology. Conflicts and Balance between Humanity, Nature and Technology. Freedom and Privacy vs. Responsibility and Security.

3. Global Information Ethics. Access, Ownership, Privacy, Security, and Community. Intellectual Property Rights. Internet and Social Network ethics.

4. Internet Security, Risks and Safety. Basic network and Internet security. Authentication and Privacy. User and provider responsibility. Security breaches and vulnerabilities. Insecure networks. Phishing and scams.

5. Societal impact of technology. Information leakage and reselling, identity theft, computer abuse and fraud. Bittorrent and foxy. Anonymizers, Freenet, crowd computing, "human flesh search engine" (人肉搜尋器).</td></tr>
<tr><td>Teaching/Learning Methodology</td><td>The course material will be delivered through lectures and seminars, labs and tutorials.

Lectures and Seminars will provide the main body of the subject material and will take an illustrative, example-based approach. Where appropriate, real-life case studies and/or guest lectures will be used to give the subject material more relevancy to daily life.

Lab sessions will reinforce the lecture material and make them more tangible through hands-on activities related to the technological issues. Students will study, recreate and experience the technological challenges pertinent to privacy and security.

Tutorials will provide students with the opportunity for more in-depth study and interaction on the lecture materials. Students will investigate, contrast, debate and present applications of lecture concepts to real-life scenarios.</td></tr>
<tr><td>Assessment Methods in Alignment with Intended Learning Outcomes</td><td>
<table>
<tr><td rowspan="2">Specific assessment methods/tasks</td><td rowspan="2">% weighting</td><td colspan="4">Intended subject learning outcomes to be assessed (Please tick as appropriate)</td></tr>
<tr><td>a</td><td>b</td><td>c</td><td>d</td></tr>
<tr><td>Exercises, assignments and case studies.</td><td>50%</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Projects and Presentations</td><td>50%</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Total</td><td>100 %</td><td colspan="4"></td></tr>
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<tr><td>Student Study Effort Expected</td><td>
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<tr><td>Class contact:</td><td></td></tr>
<tr><td>▪ Lectures</td><td>26 Hrs.</td></tr>
<tr><td>▪ Labs and Tutorials</td><td>13 Hrs.</td></tr>
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	Other student study effort:	
	▪ Self study	31 Hrs.
	▪ Assignments, exercises and projects	35 Hrs.
	Total student study effort	105 Hrs.
Reading List and Reference	o Viega (2009), *The Myths of Security: What the Computer Security Industry Doesn't Want You to Know*, O'Reilly o Johnson (2009), *Computer Ethics*, Prentice Hall (4th edition) o Quinn (2010), *Ethics for the Information Age,* Addison Wesley (4th edition) o Articles from *International Journal of Cyber Ethics in Education* (IJCEE) (e.g. J. E. Williamson, "*Digital Equity in Schools: An Overview of Current Trends*", Jan-Mar 2011, pp. 12-24.) o Articles from *Journal of Information, Communication & Ethics in Society* (JCES) o (e.g., J. D. Rendtorff & J. Mattsson, *"Ethics in the bank internet encounter: an explorative study"*, 2012, pp. 36-51). o Articles from *International Review of Information Ethics* (e.g., Richard A. Spinello, "*Privacy and Social Network Technology*", Dec., 2011, pp. 41-16.) o Articles from *Journal of Business Ethics* (e.g., Wesley Cragg & Dirk Matten, "*Ethics, Corporations, and Governance"*, Feb. 2012.) o Michael J. Sandel (2009), *Justice: What's the Right Thing to Do?,* Farrar, Straus & Giroux, New York. o Charles E. Harris, Michael S. Pritchard & Michael J. Rabins (2008), *Engineering Ethics: Concepts and Cases*, Wadsworth. o Manuel G. Velasquez (2012), *Business Ethics: Concepts and Cases*, Seventh Edition, Pearson.	

Remark: This subject fulfils CAR (HRD) requirement.