

Silabus Web Science

Tujuan:

Mempelajari dan memahami implikasi pemanfaatan Web sekaligus berbagai aspek konvergensi teknologi yang telah memungkinkan berbagai bentuk konten yang dikembangkan pengguna dalam popularitas di lingkungan online. Konsep ini secara keseluruhan merupakan suatu model demokratisasi Web yang dikenal disini sebagai "produksi sosial" (lihat Benkler, 2006) - memiliki potensi pergeseran yang fundamental terhadap bagaimana kita membuat produk budaya dan bagaimana kita memahami kekayaan intelektual.

Materi:

No	Materi
1	<p>Web History, Epistemology, Didactics</p> <ul style="list-style-type: none">○ Forerunners (Otlet, Wells, Bush, Engelbart, Nelson) - information systems, concepts, early computer systems○ Hypertext Community - information systems○ Internet history - DARPA, IP, TCP, FTP, WAIS, GOPHER○ W3C History - See W3C timeline
2.	<p>Research Methodology and Practice</p> <p>Building the Web</p> <ul style="list-style-type: none">○ Web Architecture (HTTP, HTML, URI, XML, XSLT, JavaScript, AJAX)○ Key Algorithms○ Community Inclusion- Incentives for Innovation - Openness / universality○ Decentralisation○ Governance○ Standards
3.	<p>Conceptual Framework for Web Models</p>
4	<p>Web in Society:</p> <ul style="list-style-type: none">• The Web in Society<ul style="list-style-type: none">○ E-commerce○ IP / copyright○ Privacy○ Co-evolution of society and web○ Culture and technology○ Systems theory○ Social structures and processes○ Groups and identity○ Commercial structures and economics○ Globalisation○ Social capital and power inequality <p>Collective intelligence Collective Intelligence, Social Systems Theory, Social Structures and Processes, Groups, Identity, Globalization, Social Capital, Power</p>

	Inequality.
5	Web in society: Virtual communities & politics
	<ul style="list-style-type: none"> • Deploying the Web - Operationalising Web Science for a World of International Commerce <ul style="list-style-type: none"> ○ Business Strategy ○ Information systems (basics of) ○ Cloud computing infrastructure ○ Policy ○ Regulation and security ○ Sector-specific info ○ Online markets ○ Design vs evolution ○ International context - developed and developing world ○ Profit vs common good ○ Software / hardware context (speeds etc)
6.	Wiki technologies
7.	Web and the Law
8	Privacy and Trust in the Web
	<ul style="list-style-type: none"> • Analysing the Web <ul style="list-style-type: none"> ○ Methodologies (build around case studies) ○ Uncertainties and critical thinking ○ Graph theory ○ Power laws ○ Statistics / regression analysis ○ Networks - game theory, social network analysis, ANT ○ Web mining • Understanding Web Users <ul style="list-style-type: none"> ○ Surveys ○ Qualitative
9.	Web, Life Sciences, Evolution
10	Web and Psychology
11	Internet governance, Net neutrality and the manifesto of a hacker

<http://www.w3.org/2007/Talks/0509-www-keynote-tbl/Overview.html#%281%29>

<http://www.webscience.org/>

Wendy Hall, Nigel Shadbolt, Associate Editor: Kieron O'Hara, "Foundations and Trends in Web Science,"

Miltiadis D. Lytras Ernesto Damiani, John M. Carroll Robert D. Tennyson, David Avison Ambjörn Naeve, Adrian Dale Paul Lefrere Felix Tan, Janice Sipior Gottfried Vossen (Eds.), "Visioning and Engineering the Knowledge Society - A Web Science Perspective"