Computer Literacy 1

1: Introduction
Some history (if we have time)

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Topics - 1

- Introduction
  - Highlights
  - Computer Literacy and Computer Fluency – what they are and why they are important
- History and trends
- Researching with the Internet;
  - Understanding and using on-line sources
  - Example: "Are computers Green" ?

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Topics - 2

- The modern computer
  - What's inside it and what you plug in
  - File storage and media; Data formats
- Inside the engine room
  - Operating systems and the software you don't see
  - Bits, bytes, units and measures
- Connecting it together
  - Communications (2 lectures)
  - Networks and the Internet (2 lectures)
  - wireless, broadband, Ethernet, mobile phones, 3G

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Topics - 3

- Applications (3 lectures)
  - What makes a good application?
  - Example: the spreadsheet – Excel
  - Databases and GIS
- Web pages and the World-Wide Web (3 lectures)
  - Web Pages: Function, style, content
  - HTML, Java, caches, WAP, Wikis …
  - Web 2.0
  - Design your own web site and understand others

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Topics - 4

- Security (2 lectures)
  - Viruses, phishing, Trojans, predators, fraudsters. SPAM and things that go bump in the night
  - Firewalls, proxies, encryption, PINs, anti-virus and anti-SPAM
- Worlds of the imagination
  - Graphics and visualisation, imaging, games
  - The computer as entertainer
- Collaborative computing
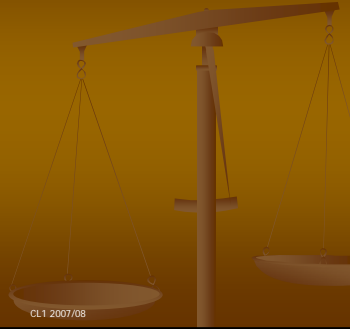 - Email, messaging, chat, VoIP

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Topics - 5

- e-everything
  - e-business, e-commerce, e-science
- Getting it right and getting it wrong – how to really mess up with a computer
- Legal, decent and ethical (2 lectures)
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- Inside Informatics - selected research topics
  - What is AI?
  - Fundamentals – what is computation?
  - All about algorithms

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It's all about
- Me, me, me ...

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