

COMP 4020 – Human-Computer Interaction 2

Calendar Description: Advanced issues in the field of human-computer interaction. Topics will be selected from current research and development issues in the field of HCI.
Prerequisite: COMP 3020 and [one of STAT 1150, STAT 2000 (B), STAT 2001 (B), STAT 2220, or PHYS 2496]. A course in cognitive psychology, such as PSYC 2480 or PSYC 2481, is recommended.

Outline

- 1) Human cognition and behaviour (1 week)
 Going beyond the desktop metaphor to focus on content, not tools
- 2) Web-based interaction (2 weeks)
- 3) Adaptable user interfaces (1 week)
 User profiles, customization
- 4) Information appliances (2 weeks)
 Example: PDA's
- 5) Prototyping complex user-interactions (3 weeks)
 Object-oriented, drag and drop, customizing controls, desktop environment, Java 2D/3D
- 6) Usability evaluation (2 weeks)
- 7) Other topics (2 weeks)
 Interactions for users with disabilities, multimedia interfaces and interactions, information visualization, computer-supported co-operative work, interactive advice systems, on-line training, speech interfaces, wearable interfaces

Text: John Carroll, *Human-Computer Interaction in the New Millennium*, Addison-Wesley, 2002.