

CS-477 CS-477 - Reinventing Interactive Systems
Instrumental Interaction and Co-Adaptive Systems

<i>Week</i>	<i>Lectures and discussion</i>	<i>Readings</i>	<i>Design activities</i>
1 April 1	Instrumental interaction and co-adaptive systems	<i>Beaudouin:</i> Instrumental Interaction <i>Mackay:</i> Co-adaption: users & technology <i>Mackay et al.:</i> Which technique works when?	<i>CHI '00</i> <i>Intellectica '00</i> <i>AVI '00</i> Deconstructing interaction Design notebook
8 April 2	Designing instruments	<i>Beaudouin & Mackay:</i> Reification, polymorphism, reuse <i>Gaver:</i> Technology affordances	<i>AVI 2002</i> <i>CHI '91</i> Oral brainstorming Video brainstorming
15 April 3	Learning	<i>Bau & Mackay:</i> Octopocus <i>Brown & Van Lehn:</i> Repair Theory	<i>UIST 2009</i> <i>Cog. Sci, '80</i> Design Space Design scenario Storyboard
22 April 4	User innovation	<i>Tsandilas & Mackay:</i> Musink <i>Nardi et al.:</i> Spreadsheet development	<i>CHI '09</i> <i>IJMMS '91</i> Paper prototype Video prototype
29 April 5	Collaborative interaction	<i>Hutchinson et al.:</i> Technology probes <i>Hollan et al.:</i> Distributed cognition	<i>CHI '03</i> <i>ToCHI '00</i> Generative walkthrough
6 May 6	Instrument architectures	<i>Klokmoose et al.:</i> Vigo <i>Olson:</i> XWeb	<i>CHI '09</i> <i>UIST '00</i> Function-Interaction table
13 May 7	Ubiquitous computing	<i>Gjerlufsen et al.:</i> Substance <i>Weiser:</i> Ubiquitous computing	<i>CHI '11</i> <i>Sci. Am. '91</i> Alternate scenarios
20 May 8	Tangible interaction	<i>Mackay:</i> Interactive paper <i>Jacobs et al.:</i> Reality-based interaction	<i>IWAR '98</i> <i>CHI '08</i> Alternate video prototype
27 May 9	Shifting the design paradigm	<i>Kuhn:</i> Structure of scientific revolutions	<i>Book '62</i> Final video prototype