

Gerhard Fischer (and Hal Eden, Hiroaki Ogata and Eric Scharff): "Design, Learning, and Collaboration" — Spring Semester 2002

## Syllabus / Schedule of Sessions

<http://swiki.cs.colorado.edu:3232/dlc>

**\*\*\* Subject to Change \*\*\***

**Remark:** Please note that this Timetable may be modified and updated at later points of time to account for emerging topics, student interests, student presentations, guest lectures, .... etc.

### January — Overview

- 14 Introduction, Discussion of Class
- 16 Overview of Design + Eric Scharff: Demo of Using the Web in Class (including Swiki) + Videotape "The Knowledge Navigator" **Assignment 1: due 1/23**
- 21 **no lecture** — Martin King Holiday (university closed)
- 23 Presentation of the Envisionment and Discovery Collaboratory → "Transcending the Individual Human Mind — Creating Shared Understanding through Collaborative Design" (with Ernesto Arias, Hal Eden, Andrew Gorman, and Eric Scharff) ACM Transaction on Computer-Human Interaction (TOCHI) Vol. 7, No. 1, March 2000, pp. 84 - 113. [<http://www.cs.colorado.edu/~gerhard/papers/tochi2000.pdf>] — **location: L3D Lab**
- 28 Overview of Learning → Fischer, G. (1998) "Making Learning a Part of Life-Beyond the 'Gift-Wrapping' Approach of Technology." Notes from 6/96 NSF Symposium on Learning and Intelligent Systems [<http://www.cs.colorado.edu/~l3d/presentations/gf-wlf/>]
- 30 Overview of Collaboration + Themes for Independent Research

## Series of Lectures about Design

### February

- 4 Design = The Science of the Artificial + Videotape "Starfire"
- 6 Role Playing with the EDC/PitaBoard — Session 1 — **location: L3D Lab**
- 11 Guest Lecture by Eric Scharff: "Squeak"
- 13 Domain-Oriented Design Environments and Critiquing → Fischer, G., Nakakoji, K., Ostwald, J., Stahl, G., & Sumner, T. (1998) "Embedding Critics in Design Environments." In M. T. Maybury & W. Wahlster (Eds.), Readings in Intelligent User Interfaces, Morgan Kaufmann, San Francisco, pp. 537-561. + plus: Janus Video Tape
- 15 Themes in Design: User Interface Design, Object-Oriented Design, Participatory Design
- 17 New Foundation for Human-Computer Interaction Research → Hollan, J., Hutchins, E., & Kirsch, D. (2001) "Distributed Cognition: Toward a New Foundation for Human-Computer Interaction Research." In J. M. Carroll (Ed.) Human-Computer Interaction in the New Millennium, ACM Press, New York, pp. 75-94.

## Series of Lectures about Learning

- 22 Lifelong Learning and Self-Directed Learning  
24 Learning on Demand and High-Functionality Applications → Fischer, G. (2001) "User Modeling in Human-Computer Interaction," User Modeling and User-Adapted Interaction (UMUAI), Dordrecht, The Netherlands: Kluwer Academic Publishers, 11(2), pp. 65-86.

### March

- 4 Guest Lecture by Yunwen Ye: CodeBroker  
6 Role Playing with EDC / PitaBoard — Session 2 — **location: L3D Lab**
- 11 Beyond One-Sided Approaches of Learning → Rogoff, B., Matsuov, E., & White, C. (1998) "Models of Teaching and Learning: Participation in a Community of Learners." In D. R. Olsen & N. Torrance (Eds.), The Handbook of Education and Human Development — New Models of Learning, Teaching and Schooling, Blackwell, Oxford, pp. 388-414.  
13 Learning When the Answer is Not Known
- 18 Organizational Learning  
20 Projects — Progress Reports
- 25 **Spring Break – no lecture**  
27 **Spring Break – no lecture**

## Series of Lectures about Collaboration

### April

- 1 Independent Research Presentations  
3 Independent Research Presentations
- 8 Knowledge Management → Smith, R. G. & Farquhar, A. (2000) "The Road Ahead for — An AI Perspective," AI Magazine, 21(4), pp. 17-40  
10 New Forms of Collaborations: learning webs, online communities, social filtering, recommender systems
- 15 Guest Lecture: Hiroaki Ogata — Collaborative Learning: Theory and Systems  
17 Open Systems: Open Source Environments for the Rest of Us
- 22 Session 1 of Final Project Presentations.  
24 Session 2 of Final Project Presentations.

**April 26: Last Day of Classes**

**Remark:** There will be no final exam for this course