

A Joint Graduate and Undergraduate Course

CSCI 7212-001

CSCI 4830-002

Design, Learning and Collaboration

Gerhard Fischer (gerhard@cs.colorado.edu)

Time: Monday and Wednesday 4:00-5:15 pm
Location: Integrated Teaching and Learning Laboratory (ITLL 1B50)

Objectives: This course will focus on creating a *new understanding of design, learning and collaboration* (as fundamental human activities) and their support with *innovative computational media and technologies*. The possibilities and the practice of design, learning and collaboration are a function of the media with which we design. The goal of the course is to explore the unique possibilities that computational media can have in impacting and transforming these activities by transcending “gift-wrapping” and “techno-determinism” in order to create true innovations.

Topics: design, design processes, design methodologies, design rationale, things that make us smart, high-functionality applications, end-user modifiability, meta-design, learning, lifelong learning, individual and social creativity, communities of practice, communities of interests, organizational learning, organizational memories, information repositories, innovative computational media and technologies supporting these goals and methods

Course Requirements and Grading: Participants are expected to play an *active* role in this course by exploring topics of personal interest in a self-directed way, by contributing knowledge derived from their own work, by being willing to learn from each other, by working on (individual or collaborative) course projects, and by being interested in interdisciplinary collaborations. Grades will be determined by the successful participation in all of these different dimensions.

Texts: Reading Material will be provided by the instructor.

Prerequisites:

1. *Interest* in (a) design, learning and collaboration processes (as they occur in software design, multi-media design, writing, architectural design, urban planning, ...), and (b) innovative uses of computational media for learning, design, and collaboration
2. *Background knowledge* in some of the following areas is desirable: human-computer interaction, software design, cognitive science, learning, education, architecture, environmental design, artificial intelligence, graphic arts,
3. *Prerequisites for enrollment:*
 - 3.1. Graduate course (CSCI 7000): Graduate standing
 - 3.2. Undergraduate course (CSCI 4830): Permission of instructor (Interested undergraduates should mail a one page brief description describing their motivation, goals and background knowledge taking this course)