

### University Graduate School 2008-2009 Academic Bulletin

### **Human-Computer Interaction**

# School of Informatics Bloomington

#### Director

Professor Erik Stolterman\* (Informatics)

#### **Steering Committee**

Elizabeth Boling\* (Education), C. Thomas Mitchell (Apparel Merchandising and Interior Design), Martin Siegel\* (Informatics)

#### **Departmental Email**

informat@indiana.edu

#### **Departmental URL**

informatics.indiana.edu

#### **Core Faculty**

(An asterisk [\*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

#### **Professors**

Curt Bonk\* (Education), Jim Craig\* (Psychology), Tom Duffy\* (Education), Dennis Gannon\* (Computer Science), Andrew Hanson\* (Computer Science), Diane Kewley-Port\* (Speech and Hearing Sciences), Annie Lang\* (Telecommunications), David Leake\* (Computer Science), Anne Massey\* (Business), Bob Port\* (Linguistics), Martin Siegel\* (Informatics), Erik Stolterman\* (Informatics), Dirk Van Gucht\* (Informatics), Charles Watson\* (Emeritus, Speech and Hearing Sciences)

#### **Associate Professors**

Elizabeth Boling\* (Education), Katy Borner (Library and Information Science), Julia Fox\* (Telecommunications), C. Thomas Mitchell\* (Apparel Merchandising and Interior Design), John Paolillo\* (Informatics, Library and Information Science), Gregory Rawlins\* (Computer Science)

#### **Assistant Professors**

Jeffrey Bardzell\* (Informatics), Eli Blevis\* (Informatics), Dennis Groth\* (Informatics), David Wild (Informatics)

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# Ph.D. Minor in Human-Computer Interaction (HCI)

## Course Requirements for the Ph.D. Minor in HCI (12 credit hours)

The human-computer interaction minor requires 12 credit hours. Students must take a 3 credit hour introductory graduate course in HCI from INFO I541 Human-Computer Interaction Design I or SLIS L542 Introduction to HCI. In addition, students must take 9 credit hours from at least one department other than the student's home department. All topical seminar classes must be approved by the student's HCI advisor for application to the minor.

#### **Grades**

A minimum of B (3.0) is required in each course that is to count toward the minor.

#### Dissertation

The student's dissertation must address issues related to human-computer interaction.

#### **Courses**

The range of courses offered is designed to enable students to construct a program for the Ph.D. Minor in HCI that is relevant to their primary research interests. Students taking topics classes must establish, to the satisfaction of the Steering Committee, the relevance of the subject matter to HCI when proposing the inclusion of such courses. Further courses will be added to or removed from the list on an ongoing basis at the discretion of the Steering Committee.

#### Business

S601: MIS Research Topics in Applications Systems Design (3 cr.)

S602: MIS Research Topics in Administration and Technology (3 cr.)

#### **Computer Science**

A546 User Interface Programming (3 cr.)

B581 Advanced Computer Graphics (3 cr.)

B582 Image Synthesis (3 cr.)

B665-B666 Software Engineering Management/Implementation (3 cr.)

B669 Topics in Database and Information Systems (1-6 cr.)
B689 Topics in Graphics and Human Computer Interaction
(1-6 cr.)

P565-566 Software Engineering I-II (3 cr.)

#### Education

P544 Applied Cognition and Learning Strategies (3 cr.)
P600 Topical Seminar in Learning Cognition and Instruction
(3 cr.)

Health, Physical Education, and Recreation Y598 Ergonomics (3 cr.) Y599 Cognitive Ergonomics (3 cr.)

#### **Informatics**

I502 Information Management: Prototyping for HCI (3 cr.) I541 Human-Computer Interaction Design I (3 cr.) I543 Usability and Evaluative Methods (3 cr.) I561 Human-Computer Interaction Design II (3 cr.)

1590 Topics in Information: Visual Analytics (3 cr.)

**I601** Introduction to Complex Systems (3 cr.)

1690 Interaction Design Theory (3 cr.)

#### **Library and Information Science**

L542 Introduction to HCI (or equivalent) (3 cr.)

L576 Digital Libraries (3 cr.)

L578 User Interface Design for Information Systems (3 cr.)

L597 Topics: Structural Datamining and Modeling (3 cr.)

L597 Topics: Information Visualization (3 cr.)

L597 Topics: Statistics for Information Science and Usability (3 cr.)

L642 Information Usage and the Cognitive Artifact (3 cr.)

L697 Advanced Topics in Information Systems (1-4 cr.)

#### **Psychological and Brain Sciences**

P450 Human Factors (graduate credit awarded with extra assignments) (3 cr.)

#### **Speech and Hearing Sciences**

S522 Digital Signal Processing (3 cr.)

#### Telecommunications

T541 Processes and Effects: Individual Level Theory and Research. (3 cr.)

T571 Applied Cognitive Emotional and Psychology Theory (3 cr.)

T602 Seminar in Processes and Effects: The Information Processing of Media. (1-3 cr.)