

**University of Washington**  
**Department of Human-Centered Design & Engineering**

**TC 407 Software User Assistance**  
**Professor David K. Farkas**

**Syllabus Spring 2009—v1**

This is the initial version of the print syllabus for the course. For more complete course information see the course website:  
<http://faculty.washington.edu/farkas/TC407>

**Week 1**

*March 31*

**Introduction to course**  
**Course logistics**

*April 2*

**Writing procedures**  
**Introduction to target software**  
**Assign students to groups**  
**UI and UA terminology**

Read course notes, "How to Write Procedures."

Read course notes, "Writing with a Task Orientation."

Read Farkas, "Logical and Rhetorical Construction of Procedural Discourse."

Complete Procedure Exercise 1.

**Week 2**

*April 7*

**Writing procedures—2**  
**Writing functional descriptions**  
**Discussion of target software**

Read Trevor Grayling "If We Build It, Will They Come?"

Complete Procedure Exercise 2.

*April 9*

**Kinds of User Assistance**  
**Enterprise-level technical support**

Prepare and deliver oral presentations on functional descriptions.

Read Association of Support Professionals, "Ten Best Web Support Sites of 2007 Site Scoring System."

**Week 3**

*April 14*

**Explanations of computer concepts**  
**The UI and UA**

Examine the AM/FM Flashlight UI Exercise and be prepared to discuss it in class.

Procedure Assignment Draft (Bring three copies for group discussion).

April 16

## **Flare demo**

### **UI text and System messages**

Read Vista User Interface Text, Vista Help and Vista Style and Tone.  
Submit revised Procedure Assignment (10% final grade).

## **Week 4**

April 21

### **Task hierarchies**

#### **Help and user's guides**

Peruse Help systems and user's guides, as assigned.  
Read course notes, "Writing with a Task Orientation."  
Ungraded assignment: Prepare a task hierarchy for Writers Database.

April 23

### **Discoverability: Context sensitivity, TOCs, indexes, search, and hyperlinking**

Read course notes, "Indexing Online Help."  
Further reading TBA

## **Week 5**

April 28

### **Wizards and tutorials**

Read Boggan, Farkas, and Welinske, "Performance Support Help: Wizards and Coaches."  
Peruse Help wizards and coaches, as assigned.  
Submit Support Plan with Prototypes (usability test component may be submitted later).

April 30

### **Audience analysis and personas User research**

Read Rosenbaum, "Stalking the User."  
Read the Sample TC 407 Usability Test Report.

## **Week 6**

May 5

### **Graphics and animated tutorials**

Peruse UA content, as assigned.  
Read Brooks "Online Theater: Making Software Demonstration Movies."

May 7

### **Guest class**

Instructor returns Support Plans and Prototypes.

## **Week 7**

May 12

### **KB articles and troubleshooting procedures**

Examine Knowledge Base content as assigned.  
Read Douglass Olberg et al, "The New Face of Procedural Content: A Real World Approach."  
Read Farkas (slide show) "Better Knowledge Base Articles For Complex Troubleshooting."

May 14

### **Content management systems**

#### **User feedback, user generated content, and community support**

Read Fisher, "Moving from Single Sourcing to Reuse with XML DITA."

Read Day, Priestly, and Schell, "Introduction to the Darwin Information Typing Architecture."

Read Severson, "Dynamic Content Delivery Using DITA."

Review a forum.

### **Week 8**

May 19

#### **Designing and developing pre-release content**

Peruse course notes "Spiral Model of Software Development."

May 21

#### **SDK documentation**

##### **Plan for exam**

Read Delaney, "Wallaby Specification" (a strategy document for creating an SDK).

Peruse SDK documentation selected by the instructor.

### **Week 9**

May 26

#### **EXAM**

May 28

#### **White papers**

##### **Submit Course Projects**

Read Radding, "The Whitepaper Whitepaper."

Re-read Severson, "Dynamic Content Delivery Using DITA" as a sample white paper.

### **Week 10**

June 1

#### **Innovations and horizons in user assistance**

Read Jerrod Larson: "Out of the Video Arcade, into the Office."

June 4

#### **Course wrap-up**

##### **Submit and demo Course Projects**

Submit and demo course projects (Help System, Manual, Embedded Help).

## Contact Info and Office Hours

**Email:** farkas@u.washington.edu

**Office:** Sieg Hall 414

### Office Hours:

- Tuesday: 11:00–12:00
- Wednesday: 1:00–2:00
- Thursday: 3:30–4:30
- And by appointment

(If possible, let me know in advance that you want to meet with me.)

## Grading and Policies

### Grading

Procedure Assignment 10%

Support Plan with prototypes (shared team grade) 13%

Human-Robot Communication Assignment 2%

Course Project (shared team grade) 25%

Individual contributions to Course Project (20%)

Comprehensive Exam: 30%

### Human-Robot Communication Project:

Each student will participate in a 75-minute, out-of-class research study conducted by HCDE professor Sarah Kriz. The study will investigate how human beings communicate with robots. Alternatively students may opt to read an article on human-robot communication and write a response paper.

### Final project:

Support plan with prototypes (shared grade): 10%

Final deliverables (shared grade): 25%

Individual contributions (based on peer evaluations): 15%

Performance in meeting with instructor: 10%

### Oral presentations:

Each student will prepare and deliver no more than three brief oral presentations (with slideware support content) in order to complete the course. Presentations may be delivered to groups or to the entire class. In some cases, the entire class will prepare a presentation. In other cases, only individual students will be asked to present on a topic. Only highly informative presentations will count toward fulfilling this requirement.

**Note:** The weighting of grades may be changed as the course proceeds. Minor assignments and readings may be added.

## **Policies**

### **Academic Integrity**

Students are expected to work independently unless other instructions are given. Consult with the instructor if you think your work plan might constitute plagiarism. You should also acquaint yourself with the TC Plagiarism Policy.

### **Attendance**

Students are expected to attend class regularly. Missing a significant number of classes will result in a deduction from the course grade.

### **Student Rights**

Please read the TC statement on student rights.

### **Human Subjects Participation**

Students registered in TC courses are part of the TC Human Subjects Pool. This means that students may be asked to participate in a research study. Participation in research studies is voluntary; students who do not wish to participate will be offered an alternative assignment. Please read the TC statement about human subjects.

### **Student Rights to Privacy: Emailing Assignments and Grades**

There are Federal laws that protect every student's right to privacy. One important aspect of your right to privacy is your right not to have the grades I assign and the comments I provide made public. So, for example, grades would never be posted outside my office door. My preference is to email assignments with grades and comments to each student. However, it is conceivable that such emails might be intercepted, enabling someone to view what I have sent you. If you do not want to accept this risk, please let me know, and I will use an alternative means of returning graded assignments to you.

## Assigned and Suggested Readings

Association of Support Professionals, "Ten Best Web Support Sites of 2007 Site Scoring System."

Bhavnani, Suresh K., James H. Garrett, Jr., Ulrich Flemming, and Doris S. Shaw, "Towards Active Assistance: Bridging the Generations, in *The Future of Computer-Aided Engineering*, eds. J. H. Garrett and D. R. Rehak, Carnegie Mellon University, Pittsburgh, PA, 1999, pp. 199-203.

Brooks, Steven, "Online Theater: Making Software Demonstration Movies, " *Intercom*, November 2005, pp. 26-28.

Day, Priestly, and Schell, "Introduction to the Darwin Information Typing Architecture."

Douglass Olberg et al, "The New Face of Procedural Content: A Real World Approach." Extended Abstract, *CHI 2008 Proceedings*.

Farkas, David K., "The Logical and Rhetorical Construction of Procedural Discourse," *Technical Communication*, 46(1), February 1999, pp. 42-54.

Fisher, Lori, "Moving from Single Sourcing to Reuse with XML DITA," *Best Practices* (Comtech), June 2003, pp. 63-68.

Gallagher, Susan, W., "Yesterday API Was Just Another Acronym; Today I Have to Document One!" *Proceedings* of the 2001 STC Regional Conference.

Grayling, Trevor, "If We Build It, Will They Come? Usability Test of Two Browser-based Embedded Help Systems," *Technical Communication*, 49(2), May 2002, pp. 193-209.

Kadilak, Denise, "Implementing Structured Frame Maker: Real-world Suggestions for Surviving the Move to Structured Authoring," *Intercom*, Feb. 2008, pp.20-25.

Kantner, Laurie, Deborah Sova, and Lori Anschuetz, " Organizing Qualitative Data from Lab and Field: Challenges and Methods," reprint of a paper given UPA Conference (Usability Professionals Association), 2005. pp. 1-13.

Larson, Jerrod, "Out of the Video Arcade, into the Office," *ACM Interactions*, Jan/Feb 2007, pp. 18-21.

Microsoft, *Microsoft Manual of Style for Technical Publications* (3rd ed.), Microsoft Press, 2004.

Microsoft, "Help," Windows Vista User Experience Guidelines, Microsoft Developer Network (MSDN).

Microsoft, "User Interface Text," Windows Vista User Experience Guidelines, Microsoft Developer Network (MSDN).

Microsoft, "Style and Tone," Windows Vista User Experience Guidelines, Microsoft Developer Network (MSDN).

Plaisant Catherine and Ben Shneiderman, "Show Me! Guidelines for Producing Recorded Demonstrations," *Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing*, 2005, pp. 171-78.

Radding, Alan, "The Whitepaper Whitepaper," (1997), <http://www.technologywriter.com>, accessed, 3/24/07.

Rosenbaum, Stephanie L. "Stalking the User: Practical Field Research," reprinted from *Intercom*, 50(10), December 2003.

Sarr, John T., "Creating an SDK: Writing on the Edge," *Intercom*, June 2001, pp. 22-24.

Severson, Eric, "Dynamic Content Delivery Using DITA," Whitepaper, Flatirons Solutions Corporation, 2007.

Stock, Ingo, Michael Weber and Eckhard Steinmeier, "Metadata Based Authoring for Technical Documentation," *Proceedings SigDOC (Design of Communications) Conference*, 2005, pp. 60-67