# **Basic Interaction Design**

ATEC 3361.001 Tuesdays, 1-3:45 pm ATEC 2.914 Fall 2015 **Cassini Nazir**, Clinical Associate Professor *cassini@utdallas.edu* Office hours TBD Arts, Technology and Emerging Communication The University of Texas at Dallas

This course is a study of interaction design for a variety of applications. You will explore principles, patterns and process for interaction design, rapid prototyping, user interface (UI) and user experience (UX) design - skills that can be applied to web publishing, mobile app development, game development, entertainment and artistic performances.

# **Learning Objectives**

Upon successful completion of this course, you will:

- Identify basics of both analog and digital interactions
- Apply disciplined visualization and the design process, implementing design principles
- Understand the history of interaction design and explore current trends in user experience design.

# **Course Materials**

You will need the following books for this course:



About Face: The Essentials of Interaction Design 4th Edition

Alan Cooper, et. al.

ISBN 1118766571

The Field Guide to Human-Centered Design IDEO.org

ISBN 0991406311 available free at designkit.org

Selected excerpts from these books will be provided to you:

- The Design of Everyday Things by Donald Norman
- Seductive Interaction Design by Stephen Anderson
- Sketching User Experiences by Bill Buxton
- *Designing Interactions* by Bill Moggridge

# What I Expect of You

- Attend all classes
- Complete all assignments on time
- Actively participate to the class, especially in sharing discoveries with one another

## Grading

You will be evaluated on:

- Attendance (only one unexcused absence allowed throughout the semester)
- Participation, (actively discussing design principles, asking questions, providing examples, using a laptop or classroom computer during class will result in 0 participation points)
- Assignments, and
- Quality of work completed from week to week.

Assignments will be discussed throughout the course, with specific requirements spelled out. See grading breakdowns at the end of this document.

## **Grading Scale**

- A 358-400 Excellent
- B 318-357 Above Average
- C 278-317 Average
- **D** 238-316 Poor
- F 0-237 Failing

## **Grading Weights**

- 15% Attendance
- 30 Assignments
- 15 Quizzes
- 40 Semester project

## **Course Timeline**

The following week-by-week breakdown explains the structure of the course. Complete explanations of what is due, additional reading materials, quizzes and assignment submissions are on eLearning, **elearning.utdallas.edu**.

The course is loosely structured in three sections, based on the *About Face* textbook:

Goal-Directed Design	Making Well-Behaved Products	Interaction Details
Weeks 1-5	Weeks 6-10	Weeks 11-16
What is goal-directed design process? What are other interaction design methods and approaches?	What makes a design solution good?	What design principles and idioms can I use for specific platforms: web, desktop, mobile and more?

## Introduction: Understanding Interaction Design

Week 1

What is interaction design? What is the design process?

## Aug 25

#### Read by Sept. 1

Cooper: Chapter 1: A Design Process for Digital Products Kolko: Understanding Interaction Design online Design Kit: Mindsets (pp. 9-25) online

#### Homework: Complete by Sept. 1

Available online in eLearning

## **Understanding the Problem: Design Research**

Week 2Research is essential to any design effort: Your solution to a problem is only as good as your definition of the problem.Sept. 1How can you use research to improve your next design?

#### Read by Sept. 8

Cooper: Chapter 2: Understanding the Problem: Design Research Design Kit: Inspiration (pp. 31-44) online

#### Homework: Complete by Sept. 8

Available online in eLearning

#### Understanding the People: Personas and Goals

Week 3Personas are a powerful tool to understand users, help make design decisions and address specific user needs. HowSept. 8can you use them in your next design?

#### Read by Sept. 15

Cooper: Chapter 3: Modeling Users: Personas and Goals

#### Homework: Complete by Sept. 15

Available online in eLearning

#### **Defining the Problem and Setting the Vision**

Week 4Informed by user feedback, how do we synthesize our knowledge and create a design solution that satisfy and inspireSept. 15users, while also addressing business goals and technical constraints?

#### Read by Sept. 22

Cooper: Chapter 4: Setting the Vision: Scenarios and Design Requirements Cooper: Chapter 5: Designing the Product: Framework and Refinement

#### Homework: Complete by Sept. 22

Available online in eLearning

## **Creative Teamwork**

Week 5What are the practices of a creative professional? What strategies can I employ for working together and assemblingSept. 22teams?

This week you assemble teams for the semester project.

#### Read by Sept. 29

Cooper: Chapter 6: Creative Teamwork

#### Homework: Complete by Sept. 29

Available online in eLearning

## **Good Product Behavior**

Week 6What are the qualities of a good digital product? What design principles can I employ to make my next design well-<br/>behaved?Sept. 29behaved?

#### Read by Oct. 6

Cooper: Chapter 7: A Basis for Good Product Behavior Cooper: Chapter 8: Digital Etiquette

#### Homework: Complete by Oct. 6

Available online in eLearning

#### **Optimizing for Platform, Posture and Perpetual Intermediates**

**Week 7** Oct. 6 How can I make the most of my interface given the user's method of interaction and knowledge-level?

#### Read by Oct. 13

Cooper: Chapter 9: Platform and Posture Cooper: Chapter 10: Optimizing for Intermediates Cooper: Chapter 11: Orchestration and Flow

#### Homework: Complete by Oct. 13

Available online in eLearning

## Interface Paradigms

Week 8 Oct 13 What design and interface paradigms make the most sense to users?

#### Read by Oct. 20

Cooper: Chapter 13: Metaphors, Idioms and Affordances Cooper: Chapter 16: Designing for Different Needs

#### Homework: Complete by Oct. 20

Available online in eLearning

#### Visual Design

Week 9

Oct 20

What are effective visual interface strategies?

#### Read by Oct. 27

Cooper: Chapter 17: Integrating Visual Design

#### Homework: Complete by Oct. 27

Available online in eLearning

## **High Fidelity Prototyping**

**Week 10** We Axure to create an interactive, high-fidelity prototype.

#### Watch and Read by Nov. 3

Learn Axure RP: Core Training: Complete 6 Step-by-Step Tutorials online Axure: Core Training Tutorial Videos (6 total) online

#### Homework: Complete by Nov. 3

Available online in eLearning

## **Details Matter: Design for Specific Platforms**

Week 11

Nov 3

Oct 27

What are best practices for specific platforms (mobile, desktop, etc)?

#### Read by Nov. 10

Cooper: Chapter 18: Designing for the Desktop Cooper: Chapter 19: Designing for Mobile and Other Devices Cooper: Chapter 20: Designing for the Web

#### Homework: Complete by Nov. 10

Available online in eLearning

#### **Human Interface Guidelines**

Week 12 Optimizing design using human interface guidelines.

# Nov 10

Read by Nov. 17 Up and Running with Material Design: Android Human Interface Guidelines online

iOS Human Interface Guidelines online

## Homework: Complete by Nov. 17

Available online in eLearning

#### Workshop

Week 13 Project workshop.

Nov 17

## Read by Dec. 1

Cooper: Chapter 17: Integrating Visual Design

#### Homework: Complete by Dec. 1

	Available online in eLearning
	Workshop
<b>Week 14</b> Dec 1	Project workshop.
	Read by Dec. 8 Cooper: Chapter 17: Integrating Visual Design
	Homework: Complete by Dec. 8 Available online in eLearning
<b>Week 15</b> Dec 8	Final Presentation Preparation blurb.
	<b>Read by Dec. 15</b> Cooper: Chapter 17: Integrating Visual Design
	Homework: Complete by Dec. 15 Available online in eLearning

## **Final Presentations**

**Week 16** Your hard work is complete and ready to present to industry judges.

# Dec 15

## **Bring to Class**

Your final project kit, which includes the following: Overview page User Interface Kit Interactive Prototype User-Scenario Video

# **Syllabus Policies**

For additional information visit **go.utdallas.edu/syllabus-policies**.