Interface Design for Games

USC School Cinematic Arts, CTIN 401

Instructor: Chevon Hicks
chevonhi@usc.edu

Introduction to the aesthetics, terminology and common trends of interface design for games. Topics include 2-D and 3-D spaces and user/camera perspectives.

Course Description: Students will explore the fundamentals of graphical user interfaces (GUI), User Experience (UX), and User Interface (UI) design. Students will also be exposed to the basic principles of Information Architecture (IA). The overall aim of the course is to give students a glimpse of the real world expectations game publishers have for Interface designs and how those designs influence user perception and behavior. We will analyze and discuss existing designs, explore the future possibilities of interface design for games, and create a suite of original designs for a racing video game.

Aesthetics: This is a lecture/lab class where students will not only discuss the principles outlined above, but also create prototype designs of their own in the Adobe Illustrator. Adobe Illustrator is a vector graphics program that is the industry standard for all basic graphic design. Students will also use a bit of Photoshop to add polish and special effects to their work. The class assumes that students have no prior knowledge of Adobe illustrator or Photoshop and is designed to walk students through the basics of these programs in an easy to understand way. The aim to make sure that students can express Game Interface ideas visually, using Illustrator and Photoshop to bring their visions to life.

Terminology: Game terminology is constantly evolving. We will explore the latest popular terms for game platforms, devices, genres and types. Learning and mastering the latest terminology in Interface Design is one of the best ways to expand one’s expertise and overall understanding the principles of good design. The class will have group critiques of student produced designs, where they will be encouraged to use the correct terminology to describe their observations. Correct terminology will also be required in written assignments.

Common Trends: The aim of this area of focus will be to expand our knowledge of the current video game landscape. Throughout this class, you are encouraged to take risks and to look beyond the examples of existing game genres to try new and different design ideas.

Required Reading:
The Laws of Simplicity, by John Maeda

Meeting Information:
Zemeckis 119
M 6-8:50
Units: 2
Pre-requisites: none
Grading and Due Dates:

Class Participation = 10%

| Mon, week 4 | reading assignment + written assignment = 2.5% |
| Mon, week 5 | reading assignment + written assignment = 2.5% |
| Mon, week 6 | reading assignment + presentation assignment = 2.5% |
| Mon, week 7 | reading assignment + written assignment = 2.5% |
| Mon, week 8 | reading assignment + written assignment = 2.5% |
| Mon, week 9 | reading assignment + written assignment = 2.5% |
| Mon, week 9 | evidence of 2 hours of lab work progress = 2.5% |
| Mon, week 10 | reading assignment = 2.5% |
| Mon, week 10 | evidence of 2 hours of lab work progress = 5% |
| Mon, week 11 | reading assignment = 2.5% |
| Mon, week 11 | evidence of 2 hours of lab work progress = 5% |
| Mon, week 11 | game interface presentation = 5% |
| Mon, week 12 | reading assignment = 2.5% |
| Mon, week 12 | user flow screen design = 5% |
| Mon, week 12 | evidence of 2 hours of lab work progress = 5% |
| Mon, week 13 | reading assignment = 2.5% |
| Mon, week 13 | user flow screen design 2 = 2.5% |
| Mon, week 13 | evidence of 2 hours of lab work progress = 5% |
| Mon, week 14 | tablet screen design due = 2.5% |
| Mon, week 14 | evidence of 2 hours of lab work progress = 2.5% |
| Mon, week 15 | final presentation due 25% |

Course content (summarized by class meeting)

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<tr>
<th>Wk</th>
<th>Monday</th>
<th>Project Schedule</th>
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<tbody>
<tr>
<td>1</td>
<td>Course Overview, Expectations &amp; Schedule</td>
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<tr>
<td></td>
<td>Discussion: Introduction to Chevon Hicks and the work of Heavenspot. Goals of the course. Required Reading instructions.</td>
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<td>Lab: Introduction to Adobe Illustrator. Review game interface designs and general art created in Adobe Illustrator. Create and manipulate basic shapes and text.</td>
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<td>Day</td>
<td>Discussion</td>
<td>Lab</td>
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<td>2</td>
<td>Beautiful Interface Gallery 01, 2D video game Interfaces of the 1970s</td>
<td>Students trace a simple interface to become more accustomed to Illustrator design tools.</td>
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<td>4</td>
<td>Present plans for Racing Game Interface.</td>
<td>Students create 3 different button types in Adobe Illustrator.</td>
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<td>5</td>
<td>Re-Present plans for Racing Game Interface.</td>
<td>Students continue tracing and finalize a simple interface to become more accustomed to Illustrator design tools.</td>
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<td>6</td>
<td>Present final plans for Racing Game Interface.</td>
<td>Students begin wire framing their racing game interfaces in Adobe Illustrator. Individual instruction given to each student.</td>
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| 7 | Studio Visit at Heavenspot  
    Discussion with real designers and information architects.  
    Students present their in-progress wireframes. Discuss Law Four, "Learn".  
    Lab: Students begin designing Racing Game Interfaces onsite, based on wireframe from the previous week. (2)  
    Assignment: Observation Report – what are the screens that lead up to the actual gameplay? These screens are also crucial to interface design. One pager. Read Law 5 – "Differences". | - Reading Assignment Due: "Law Four – Learn"  
- Written Assignment: User Flow, “What are the screens that lead up to the gameplay?” Be as descriptive as possible. |
|---|---|---|
| 8 | Students present observation reports, with class feedback.  
    Discussion: Interface Designs of the future. What will interfaces look like for cutting edge technologies like Microsoft’s Kinect, or Mattel’s "Mindflex". Discuss Law 5 – Differences.  
    Lab: Students continue working on Racing Game Interfaces with personalized instruction. (3)  
    Assignments Given: Strike efficiencies in user flow up until the game play screen. Read Law Six, "Context". | - Reading Assignment Due: "Law 5 – Differences"  
- Written Assignment Due: User Flow, “What are the screens that lead up to the gameplay?” Be as descriptive as possible. |
| 9 | Students present user interface flow efficiency reports, with class feedback.  
    Discussion: Interface Designs of the future. What will interfaces look like for cutting edge technologies like Microsoft’s Kinect, or Mattel’s “Mindflex”. Discuss Law 6 – Context.  
    Lab: Students continue working on Racing Game Interfaces with personalized instruction. (4)  
    Assignments Given: Read Law Seven, “Emotion". | - Reading Assignment Due: "Law 6 – Context"  
- Written Assignment Due: Strike efficiencies in user flow, with our own racing game in mind.  
- Schedule at least 2 hours Lab Time to make progress on your designs. |
| 10 | Students present user interface flow efficiency reports, with class feedback.  
    Discussion: How can we apply at least one aspect of future interface designs to our current work? Group discussion.  
    Lab: Near final polish of interface designs in Illustrator and photoshop. Hands on lab direction. (5)  
    Assignments Given: Read Law Eight, “Trust". | - Reading Assignment Due: "Law 7 – Emotions”  
- Schedule at least 2 hours Lab Time to make progress on your designs. |
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| 11   | Desert Racing Game Interface Reviews – Guest Critique  
Discussion: Free Portfolio sites to showcase your work. Discuss Law 8 from reading.  
Lab: Archiving your design file. Saving for Web. Pushing work to a portfolio site.  
Assignment: Begin Designing Wire frame screen #1 from previous user Flow document. Read Law 9 – Failure.  
- Reading Assignment Due: “Law 8 – Emotions”  
- Game Interface Presentation  
- Schedule at least 2 hours Lab Time to make progress on Flow Screen 1. |
| 12   | Desert Racing Game Interface Lead Up Screen 1 Presentation  
Discussion: Which futuristic interface design theme did you apply to your work?  
Assignment: Begin Designing Wire frame screen #2 from previous user Flow document. Read Law 10 – The One.  
- Reading Assignment Due: “Law 9 – Failure”  
- User Flow Screen 1 Due.  
- Schedule at least 2 hours Lab Time to make progress on Flow Screen 2. |
| 13   | Desert Racing Game Interface Lead Up Screen 2 Presentation  
Discussion: The technological limitations and advantages of porting games over to mobile platforms like tablets and smart phones.  
Assignment: Port main design over to a mobile tablet platform. Read Law 10 – The One.  
- Reading Assignment Due: “Law 10 – The One”  
- User Flow Screen 2 Due.  
- Schedule at least 2 hours Lab Time to make progress on porting main design to tablet screen. |
| 14   | Desert Racing Game Interface Lead Up Screen 3 Presentation  
Discussion: Interfaces that don’t use words or text, but are purely visual.  
Assignment: Begin Designing Wire frame screen #4 from previous user Flow document.  
- Tablet Screen Due.  
- Schedule at least 2 hours Lab Time to make progress on Flow Screen 3. |
| 15   | Desert Racing Game Interface Lead Up Screen 4 + Final Presentation  
Discussion: Guest Speaker. Next steps – advice and career options for your newfound expertise.  
Assignment: None!  
- Final Presentation Due. |
More on the Assignments

Reading Assignments: The assigned book, John Maeda’s “Laws of Simplicity” was chosen for it’s unique perspective on simplification in design. Maeda was the Associate Director of Research at MIT before becoming President at RISD. The book itself is quite simple, at 100 pages in total (by design). Maeda breaks down some very important theories of visual design and usability, that will become consistent themes used to approach design challenges.

Written Assignments: Outside of the classroom, it is important to think about the ideas and principles discussed and how to apply them to your work. Designers spend a lot of time thinking, when they’re not doing, so the written assignments are designed to allow students to organize and reinforce observations, ideas and design tactics.

Design Assignments: The lab portion of our course is designed to familiarize students with the tools to realize their designs and to take advantage of the instructor’s expertise while he is on site. It is expected that students will book as much lab time as necessary throughout the semester, with a required minimum 2 hours a week beginning in the 9th week.

Reviews & Critiques: Our course will have routine design reviews between the student and instructor, as well as group critiques where students will present their work to the class and receive feedback. Feedback will be gathered, but the Professor will instruct the student on which aspects to include in the next revision of their work. After presenting their work, students should take handwritten notes on all feedback and star those elements of feedback which the Instructor deems necessary for inclusion.

Final Project: Students are expected to complete their final sets of interface designs by the end of the semester. The deliverables are listed in the right hand column of the schedule above.

Final Presentations & Publication: The final deliverables for the class are a finished set of interface designs that can be published to the Interactive Media Division website. The class will also present their final projects at the IMD Wednesday seminar on Dec 1 from 6-8pm. Students are not required to present, as the instructor may present a select few himself. If you are chosen to submit, and choose to present your designs yourself, please understand that presentations should consist of a concise explanation of the interface features, design concepts, and a brief walkthrough of screens outlining User flow efficiencies.

Missing an Assignment Deadline, Incompletes:
The only acceptable excuses for missing an assignment deadline or taking an incomplete in the course are personal illness or a family emergency. Students must inform the professor before the assignment due date and present verifiable evidence in order for a make-up to be scheduled. Students who wish to take incompletes must also present documentation of the problem to the instructor or teaching assistant before final grades are due.

Attendance Policy:
Punctual attendance at all classes is mandatory. Students arriving late or leaving early will be marked absent from class. The following guidelines are from the Interactive Media Division handbook regarding absences and grading and apply to all students.

Guidelines for absences affecting grading
- Two unexcused absences: lowers grade one full grade point
- Three unexcused absences: lowers grade two full grade points
- Four or more unexcused absences: request to withdraw from course (instructor’s discretion)

Excused absences are:
• Illness (with a doctor's verification)
• Family or personal emergency (with verification)

**Note for students with disabilities:**
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to us as early in the semester as possible. DSP is located in STU 301, and is open 8:30am - 5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

**Academic Integrity:**
The School of Cinematic Arts expects the highest standards of academic excellence and ethical performance from USC students. It is particularly important that you are aware of and avoid plagiarism, cheating on exams, submitting a paper to more than one instructor, or submitting a paper authored by anyone other than yourself. Violations of this policy will result in a failing grade and be reported to the Office of Student Judicial Affairs. If you have any doubts or questions about these policies, consult "SCAMPUS" and/or confer with the instructor.