



University of the Aegean

MSc on Industrial & Interactive Products & Systems Design

Interaction Design Studio (Studio 2) – Course Syllabus

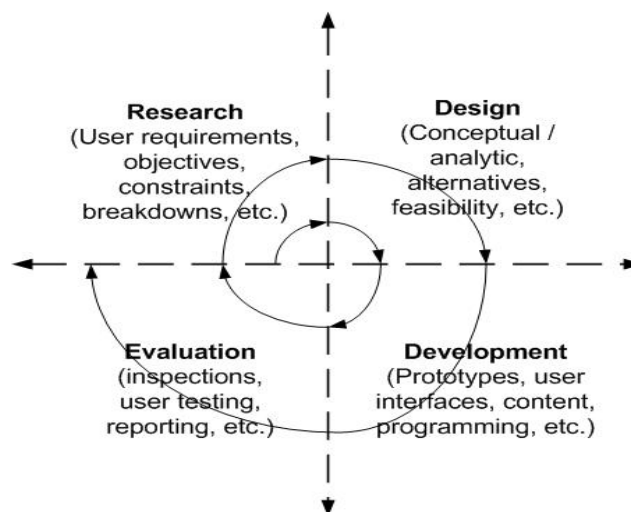
**Instructors:** Panayiotis Koutsabasis, [kgp@aegean.gr](mailto:kgp@aegean.gr); Spyros Vosinakis, [spyrosv@aegean.gr](mailto:spyrosv@aegean.gr); Modestos Stavrakis, [mod@aegean.gr](mailto:mod@aegean.gr); Vangelis (Evangelos) Vlachogiannis, [evlach@aegean.gr](mailto:evlach@aegean.gr)

## General description and objectives

Interaction design studio is concerned with the study of communication between humans and interactive products and systems. The emphasis is on the creative and collaborative design of interactive systems, invention and selection of dialogues, interactions, interfaces and content of interactive products and systems of any kind, including mobile, domestic and medical devices, as well as for the Web and digital media. The course emphasizes the conduction of an interaction design project, such as: a digital media application or a web application. The design process starts with requirements and market research and ends up with the evaluation of interactive prototypes with the participation of users.

The course applies principles and methods discussed in the courses of Human-Computer Interaction (1<sup>st</sup> semester) and Informatics (1<sup>st</sup> semester). In addition, students can develop projects in thematic areas of Advanced User Interfaces (2<sup>nd</sup> semester).

The goal of the course is to support students in reaching a complete design of an interactive product, like a service-oriented web site, a multimedia application and so on. The project is considered complete if all major lifecycle activities are conducted twice; these activities defined as: research, design, development and evaluation.



## Design brief

**Design a public (multi-) touch multimedia kiosk in design teams of 4-5 students.**

- Specific design goal for team #1: Design a (multi-) touch interactive table in a cafeteria (e.g. Plaza) to be installed on top of regular tables. The multimedia application should provide “business services” like browsing/searching the product catalogue and order, and “entertainment services” like web browsing, games and communication to other tables. The design should take into account “tangible requirements” like table form, table dimensions, etc.; however it should focus on the aspects of the user interface. You should make careful and justified use of design methods to deliver a brief design report within the virtual world that will show off the design models created and a 3D model of interactive table and 7-10 screens the user interface; if the table is multitouch, you should also specify the main gestures to be employed.
- Specific design goal for team #2: Design a (multi-) touch information kiosk at a theatre (e.g. Apollon) or cinema to be installed at the entrance. The multimedia application should provide “business services” like browsing/searching the programme and seat/ticket reservation, and “social and communication services” like requesting a specific play/film and rating of the current play/film. The design should take into account “tangible requirements” like kiosk form, dimensions, etc.; however it should focus on the aspects of the user interface. You should make careful and justified use of design methods to deliver a brief design report within the virtual world that will show off the design models created and a 3D model of kiosk including 7-10 screens of the user interface; if the kiosk is multitouch, you should also specify the main gestures to be employed.

Guidelines:

- Choose your group mates wisely: you need complementary expertise within the group!
- We will perform most design activities and presentations within the virtual world.
- The activity will run until Easter holidays. Later on you will develop and test the user interface in software (Flash).

## Detailed schedule

		Activities and goals for each week	Where? (class / computer lab / virtual world)
2	8 March	<p><b>Discussion about the problem; group knowledge &amp; skills; design research methods</b></p> <p><i>Provide clarifications about the interaction design project</i></p> <p><i>Form groups</i></p> <p><i>Decide upon the use of research methods like: observation, interviews, personas, contextual design work models (e.g. flow model, artifact model, physical model, etc.), moodboards, ‘competitor’ analysis (other similar interactive systems), etc.</i></p> <p><i>Allocate related tasks wisely, and discuss the expected deliverables.</i></p>	<p><b>Class:</b></p> <p>Explain the role of instructors (emphasis on posing questions, not providing solutions or guidelines) and the role of students (motivation, autonomy, group work)</p> <p>Organise in groups</p> <p>Construct a detailed plan of work for design research (see on the left column)</p> <p><b>Virtual world (as part of the AUI course):</b></p> <p>Demonstrate the tools;</p> <p>Exercise for students: “prepare a demo presentation within the world”</p>
3	15 March	<p><b>Design research</b></p> <p><i>Decide upon the content to be used, e.g. make a content inventory (perhaps from existing web content or your photos of the place).</i></p> <p><i>Also, decide upon visual design and brand identity issues like: typography, colours, logos, and aesthetic form elements.</i></p> <p><i>Make decisions about the use of conceptual design methods like: concept model, storyboards, sketches.</i></p> <p><i>Allocate related tasks wisely, and</i></p>	<p><b>Virtual world:</b></p> <p>Atomic presentations of design research – 20’ each group + 5’ instructors’ questions.</p> <p><b>Class:</b></p> <p>Construct a detailed plan of work for conceptual design. (see on the left column)</p> <p>Discussion of the plan with instructors (questions)</p>

		<i>discuss the expected deliverables.</i>	
4	22 March	<p><b>Conceptual design</b></p> <p><i>Decide upon analytic design methods like: flow charts, wireframes, etc., on the basis of the goals of your design.</i></p> <p><i>Build personas for running usage scenarios</i></p> <p><i>Gradually refine these models to basic screen designs.</i></p> <p><i>Also make decisions about design &amp; usability guidelines for multimedia.</i></p> <p><i>Allocate related tasks wisely, and discuss the expected deliverables.</i></p>	<p><b>Virtual world:</b></p> <p>Atomic presentations of conceptual design – 20’ each group + 5’ instructors’ questions.</p> <p><b>Class:</b></p> <p>Construct a detailed plan of work for analytic design (see on the left column).</p> <p>Discussion of the plan with instructors (questions)</p>
5	29 March	<p><b>Analytic design and prototype development</b></p> <p><i>Decide the basic set up of the 3D prototype: landscape, content, textures, other 3D objects, etc.</i></p> <p><i>Build personas for running usage scenarios</i></p> <p><i>Allocate related tasks wisely, and discuss the expected deliverables.</i></p>	<p><b>Virtual world:</b></p> <p>Atomic presentations of analytic design– 20’ each group + 5’ instructors’ questions.</p> <p>Construct a detailed plan of work for development (see on the left column).</p> <p>Discussion of the plan with instructors (questions)</p>
6	5 April	<p><b>Prototype development</b></p> <p><i>Run scenarios of use for showing off the prototype.</i></p> <p><i>Plan the evaluation session: users, tasks, protocol, data gathering (e.g. interviews, questionnaires, etc.) and analysis.</i></p> <p><i>Allocate related tasks wisely, and discuss the expected deliverables.</i></p>	<p><b>Virtual world:</b></p> <p>Atomic presentations of virtual world prototypes – 20’ each group + 5’ instructors’ questions.</p> <p>Construct a detailed plan for evaluation.</p> <p>Discussion of the plan with instructors (questions)</p>
7	12 April	<p><b>Evaluation</b></p>	<p><b>Virtual world:</b></p> <p>Presentation of evaluation – 20’ each group + 5’ instructors’</p>

			<p>questions.</p> <p><b>Class:</b></p> <p>Evaluation of the virtual studio activity</p> <p>Atomic and group cross evaluation</p>
Easter Holiday			
8	3 May	<b>Development (Flash)</b>	Computer lab
9	10 May	<b>Development (Flash)</b>	Computer lab
10	17 May	<b>Development (Flash)</b>	Computer lab
11	24 May	<p><b>Development &amp; user testing preparation</b></p> <p>Discuss &amp; planning for user testing: users, timeframe, testing protocol, questionnaire, briefing, etc.</p>	Computer lab
12	31 May	<p><b>User testing</b></p> <p>Discuss planning of the final presentation and the final document: table of contents, methods used, deliverables, references, etc.</p>	<p>Presentation of user testing</p> <p>Discussion</p>
13	7 June	<p><b>Final presentation</b></p> <p>Also, evaluation of development and user testing methods</p>	In the class