Course unit title:	**Visual Design for Computer Applications**
Course unit code:	AAVC440
Type of course unit:	Art Elective
Level of course unit:	Bachelor
Year of study:	
Semester when the unit is delivered:	
Number of ECTS credits allocated :	6
Name of lecturer(s):	
Learning outcomes of the course unit:	• Explain the theoretical foundations of designing for interaction between humans and computers and discuss what and who is involved in the process of interaction design. • Explain the user experience and describe how to characterize the user experience in terms of usability, user experience goals, and interactive system design principles. • Describe Windows Concepts and Interfaces as well as discuss how to design interfaces for different environments, people, places, and activities. • Present an overview of the major interface developments, ranging from WIMPs (windows, icons, menus, and pointer) to wearables. • Describe prototyping activities with regards to systems interfaces design. • Demonstrate basic knowledge on designing user interfaces for windows applications. • Demonstrate basic knowledge on designing user interfaces for smartphone applications.
Mode of delivery:	Face-to-face		
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Prerequisites:	AAVC341, AAVC330	Co-requisites:	None

Recommended optional program components:	None
Course contents:	**Introduction to Human-Computer Interaction:** Explain the difference between good and poor interaction design, what interaction design is and how it relates to human-computer interaction and other fields. What is involved in the process of interaction design, the different forms of interaction design, the human factor etc. **Interaction Design:** Explain what is communication and collaboration, the main kinds of social mechanisms that are used by people to communicate and collaborate, the range of collaborative systems that supports this kind of social behavior, how field studies inform the design of collaborative systems, etc. **The Computer and Human-Computer Interaction:** Involves the various devices and implementation beds as well as technological constraints and opportunities, the problem space, how to conceptualize interaction, the pros and cons of using interface metaphors as conceptual models, the relationship between conceptual design and physical design, etc. **Web Interfaces:** The notion of a paradigm and set the scene for how the various interfaces have developed in interaction design, overview of the many different kinds of interfaces, highlight of the main design and research issues for each of the different interfaces, considerations which interface is best for a given application or activity, etc.

	Introduction to Interactive System Design: Includes what 'doing' interaction design involves, some advantages of involving users in development, the main principles of a user-centered approach, etc.
	Interfaces Design and Prototyping: Includes prototyping and different types of prototyping activities with regards to systems interfaces design, production of simple prototypes from the models developed during the requirements activity, production of a conceptual model for a product, use of scenarios and prototypes in design, a range of tool support available for interaction design, etc.
	Visual Design for Windows Applications: Design Windows Applications. Use forms, controls, menus and dialog boxes, modify their properties and apply all HCI concepts on their design. Have the ability to experiment with and use new controls, properties, etc.
	Visual Design for Windows Mobile Phone: Explain the major differences of user interfaces between windows applications and mobile phone applications. Introduce major tools and environments including Silverlight, XNA and Expression Blend. Use windows phone templates and their major controllers (e.g., text blocks, buttons, slide bars). Orientation and layouts of windows mobile phones. Introduce XAML for Windows Mobile Phone 7 design. How to get an application in the market (security, privacy, copyrights and certificates).
Recommended and/or required reading:	Visual C# Documentation Windows Mobile Phone Developers Guide
Textbooks:	Alan Dix, et al, **Human-Computer Interaction**, 3rd Edition, Prentice Hall, 2004. Helen Sharp, Yvonne Rogers, Jenny Preece**. Interaction Design: beyond human-computer interaction** (2nd edition), www.id-book.com John Sharp, **Microsoft Visual C# 2008 Step by Step**, Microsoft Press, 2007. Charles Petzord, **Programming Windows Phone 7**, Microsoft Edition.
References:	Ben Shneiderman and Catherine Plaisant, **Designing the User Interface**, 4th Edition, Addison Wesley, 2005.
Planned learning activities and teaching methods:	The course is structured around lectures, group projects and presentations, laboratory exercises and individual work. During the lectures, students are encouraged to participate in discussions enabling the exchange of ideas and examples. Laboratory exercises are handed to students and their solutions are discussed at laboratory periods. Additional tutorial time at the end of each lecture is provided to students as well as additional notes for each section of the course and worksheets, which process in the lab or as homework. Students are expected to demonstrate the necessary effort to become confident with the different concepts and topics of the course.
Assessment methods and criteria:	• Group Project 25% • Test: 15% • Laboratory Work: 10% • Final Exam: 50%
Language of instruction:	English
Work placement(s):	No