



## FICHA DE UNIDADE CURRICULAR

### Unidade Curricular

201322003 - DESIGN DE INTERAÇÃO

### Tipo

Obrigatória

Ano lectivo	Curso	Ciclo de estudos	Créditos
2022/23	Mestrado Design Comunicação	2º	3.50 ECTS

Idiomas	Periodicidade	Pré requisitos	Ano Curricular / Semestre
Português ,Inglês	semestral		2º / 1º

### Área Disciplinar

Design

### Horas de contacto (semanais)

Teóricas	Práticas	Teórico práticas	Laboratoriais	Seminários	Tutoriais	Outras	Total
0.00	0.00	3.00	0.00	0.00	0.00	0.00	3.00

### Total Horas da UC (Semestrais)

Total Horas de Contacto	Horas totais de Trabalho
42.00	98.00

### Docente responsável (nome / carga lectiva semanal)

Marco António Neves da Silva

### Outros Docentes (nome / carga lectiva semanal)

Marco António Neves da Silva 3.00 horas

### Objetivos de aprendizagem (conhecimentos, aptidões e competências a desenvolver pelos estudantes)

Introduzir os alunos à área do design de interação, enquanto prática multidisciplinar a desenvolver em suportes digitais, analógicos ou híbridos.

Desenvolver estratégias de interatividade e participação de potenciais utilizadores, entendendo o

seu potencial quando aplicadas a um projecto de design de comunicação.

Explorar abordagens interativas nos projectos de design, estudando e aprofundando os elementos e tipos de interação, bem como a experiência do utilizador.

## **Conteúdos Programáticos / Programa**

A unidade curricular estabelece um contexto para se poder analisar e conceber objectos, produtos e sistemas interativos.

O design de interação será discutido enquanto base de relação com outras áreas emergentes no campo do design, estabelecendo possibilidades de melhoria e inovação na constituição material do quotidiano dos utilizadores.

Serão abordados os conceitos fundamentais, úteis para o desenvolvimento de processos de trabalho, que ocorram sem constrangimentos tecnológicos. Estes resultarão em criações que estabeleçam de forma intuitiva um diálogo com os utilizadores.

Propõe-se um entendimento alargado das ideias interativas e participativas, bem como da compreensão de interface como intermediário na relação comunicativa.

## **Demonstração da coerência dos conteúdos programáticos com os objectivos de aprendizagem da unidade curricular**

Os conteúdos a lecionar permitem compreender, estabelecer e adaptar um processo para produção de interação, ora em situações analógicas, ora em situações de necessidade digital.

Esta diversificação pretende aproximar os conhecimentos e competências a adquirir, de uma noção o mais completa possível das potencialidades da interação e da sua importância junto da experiência do utilizador.

## **Metodologias de ensino (avaliação incluída)**

Será atribuída atenção à análise crítica das matérias, através de exposição partilhada e debate em torno de casos de estudo.

A exposição de conteúdos textuais, esquemáticos, visuais e audiovisuais antecederá o desenvolvimento de projectos de carácter prático, a que se seguirá um acompanhamento individual e em grupos de trabalho.

A avaliação dos alunos será feita de acordo com o definido pelo regulamento da FA-ULisboa, isto é, de uma forma contínua. Os elementos de avaliação serão um exercício escrito de pesquisa, um projeto de carácter prático e a participação individual.

Todos os momentos de acompanhamento constituem situações de reflexão e aprendizagem. Estes momentos são determinados pelos critérios de criatividade, inovação e demonstração de conhecimentos, aos quais se juntam a argumentação e apresentação. São também factores de ponderação a assiduidade e a participação.

Os alunos com nota inferior a 10 valores em Avaliação contínua podem-se inscrever em exame de 1<sup>a</sup> ou 2<sup>a</sup> chamada, que consistirá na realização de uma prova escrita.

Os alunos com nota superior a 10 valores em Avaliação contínua podem-se inscrever em exame de 1<sup>a</sup> ou 2<sup>a</sup> chamada, que consistirá na apresentação dos elementos de avaliação do semestre e respetivas propostas de melhoria.

## **Demonstração da coerência das metodologias de ensino com os objectivos de aprendizagem da unidade curricular**

O design de interação é um estudo sobre os comportamentos partilhados e recíprocos entre um utilizador e uma constituição material. Nesse sentido torna-se importante definir e aplicar um processo de trabalho que considere a situação de utilização, as estratégias para interagir e os intervenientes. Desse modo é benéfico a análise dos processos já usados, sua implementação ou adequação. O desenvolvimento de projetos irá permitir a acumulação de experiência que deverá ser confrontada com exemplos de referência.

## **Bibliografia Principal**

- Buxton, B 2007, Sketching user experiences: getting the design right and the right design, Morgan Kaufman, San Francisco.
- Cooper, A, Reimann, R & Cronin, D 2007, About face 3: the essentials of interaction design, Wiley Publishing, Indianapolis.
- Dubberly,H., Haque,U., Pangaro,P. 2009 'What is interaction? Are there different types?. in <http://www.dubberly.com/articles/what-is-interaction.html>
- Höök, K & Löwgren, J (2021). Characterizing Interaction Design by Its Ideals: A Discipline in Transition, *She Ji: The Journal of Design, Economics, and Innovation*, 7(1): 24-40. Moggridge, B 2007, Designing interactions, The MIT Press, Cambridge and London.
- Saffer, D 2007, Designing for interaction: creating smart applications and clever devices, 2nd edition, New Riders, Berkeley, California.
- Tidwell, J. (2011). Designing Interfaces: Patterns for Effective Interaction Design (2nd Ed.). O'Reilly

## **Bibliografia Complementar**

- Arvola, M. & Artman, H. (2007) Enactments in Interaction Design: How Designers Make Sketches Behave. *Artifact*, 1(2): 106-119.
- Blauvelt, A (2008) 'Towards relational design', *Design Observer*, acedido 20 Mar 2009, <<http://www.designobserver.com/archives/entry.html?id=38845>>.
- Blevis, E. & Stolterman, E. (2008) The Confluence of Interaction Design & Design: From Disciplinary to Transdisciplinary Perspectives. Proceedings of DRS2008, Design Research Society Biennial Conference, Sheffield, UK, 16-19 July, 344/1--12.
- Bolter, J & Gromala, D (2003) 'Text rain: the digital experience', in Windows and mirrors: interaction design, digital art, and the myth of transparency. MIT Press, Cambridge MA. Bonsiepe, G 1999, Interface: an approach to design, Jan van Eyck Akademie, Maastricht.
- Bruinsma, M (1999) An ideal design is not yet, acedido 26 Nov 2008, <<http://www.maxbruinsma.nl/index1.html?ideal-e.html>>.
- Davis, M (2008) 'Toto, I've got a feeling we're not in Kansas anymore...' *Interactions* XV(5), 28-34.
- Durrant A. C., Vines J., Wallace J., Yee, J. (2017) Research Through Design: Twenty-First Century Makers and Materialities. *Design Issues*: 33(3).
- Engelbart. D C (1962) Augmenting human intellect: a conceptual framework, Stanford Research Institute, Menlo Park, California, acedido 16 Dez 2010, <<http://dougengelbart.org/>>

- pubs/augment-3906.html>.
- Giaccardi E. (2019) Histories and futures of research through design: From prototypes to connected things. *International Journal of Design*, 13(3), 139-155.
- Hallnas, L & Redstrom, J (2006) Interaction design: foundations, experiments, The Interactive Institute, The Swedish School of Textiles, University College of Boras, Boras.
- Heeter, C (2000) 'Interactivity in the context of designed experiences', *Journal of Interactive Advertising*, 1(1). American Academy of Advertising, pp.4-15, acedido 5 Mai 2010, <<http://jiad.org/article2>>.
- Hubner, M & Klanten, R (eds.) (2008) Fully booked: cover art and design for books. Die Gestalten Verlag, Berlin.
- Interaction Design Association, <<http://www.ixda.org>>.
- Interaction Design.org, <<http://www.interaction-design.org>>.
- Manovich, L (2001) The language of new media, MIT Press, Cambridge and London.
- Mugge, R, Schifferstein, H & Schoormans, J (2004) Personalizing product appearance: the effect on product attachment, Delft University of Technology, The Netherlands, acedido 13 Fev 2008, <<http://static.studiolab.io.tudelft.nl/gems/mugge/MuggeDE2004.pdf>>.
- Neves, M (2013) 'Printed Interactivity Towards a new understanding of graphic design', *Iridescent: Icograda Journal of Design Research*, 2(2).
- Norman, D (2004) Emotional design: why we love (or hate) everyday things. Basic Books. New York.
- O'Reilly, T (2005) What is Web 2.0: design patterns and business models for the next generation of software, acedido 21 Out 2010, <<http://oreilly.com/web2/archive/what-is-web-20.html>>.
- Richards, R (2005) 'Users, interactivity and generation', *New Media and Society*, 8(4), Sage Publications, pp. 531-550.
- Salonen, E (2010) Common interest: documents: design and format solutions for the arts, culture, academia and charities, Index Book, Barcelona.
- Stolterman, E. (2008) 'The nature of design practice and implications for interaction design research'. *International Journal of Design* 2(1), 55-65.
- Tapia, A (2003) 'Graphic design in the digital era: the rhetoric of hypertext', *Design Issues*, 19(1), The MIT Press, pp.5-24, acedido via JStor, 1 Fev 2010. T
- Tapscott, D (2009) Grown up digital: how the net generation is changing your world, McGraw Hill, New York.
- Wiberg, M (2018). *The Materiality of Interaction: Notes on the Materials of Interaction Design*. MIT Press, Cambridge, MA.



## CURRICULAR UNIT FORM

**Curricular Unit Name**

201322003 - Interaction Design

**Type**

Compulsory

Academic year	Degree	Cycle of studies	Unit credits
2022/23	Master Communication Design	2	3.50 ECTS

Lecture language	Periodicity	Prerequisites	Year of study/ Semester
Portuguese ,English	semester		2 / 1

**Scientific area**

Design

**Contact hours (weekly)**

Theoretical	Practical	Theoretical-practicals	Laboratory	Seminars	Tutorial	Other	Total
0.00	0.00	3.00	0.00	0.00	0.00	0.00	3.00

**Total CU hours (semester)**

Total Contact Hours	Total workload
42.00	98.00

**Responsible teacher (name /weekly teaching load)**

Marco António Neves da Silva

**Other teaching staff (name /weekly teaching load)**

Marco António Neves da Silva 3.00 horas

**Learning objectives (knowledge, skills and competences to be developed by students)**

Introduce students to interaction design, as a multidisciplinary practice to develop in digital, analog and hybrid media.

Develop strategies for interactivity and participation of potential users, understanding their potential when applied to a communication design project.

Explore interactive approaches in design projects, studying and deepening interaction elements

and types, as well as user experience.

## Syllabus

The curricular unit provides a context to analyze and conceive interactive objects, products and systems. Interaction design will be discussed and used as a basis of relationship with other emerging areas in the design field, establishing possibilities for improvement and innovation in user material constitution of the everyday. Basic concepts will be described, that are useful for the development of work processes, which occur without technological constraints. These will result in establishing an instinctively dialogue with users.

We propose a broad understanding of interactive and participatory ideas, as well as the interface as an intermediary for communicative relationship.

## Demonstration of the syllabus coherence with the curricular unit's learning objectives

The contents to teach will allow understanding, establishing and adapting a process for the production of interaction, sometimes in analogical situations, sometimes when a digital solution is needed.

This diversification aims to bring closer knowledge and skills to acquire, of a more complete notion of the potential of interaction and its importance to user experience.

## Teaching methodologies (including evaluation)

Attention will be given to the critical analysis of the material, through shared presentation and discussion around case studies.

Exposure of textual, schematic, visual and audiovisual content precede the development of practical projects, to be followed by individual and work groups support.

Evaluation of students will be carried out in accordance with FA-ULisboa regulations, that is, on a continuous basis. Evaluation elements will be a written research exercise, a practical project and individual participation.

All accompanying moments are reflection and learning situations. These moments are determined by criteria of creativity, innovation and demonstration of knowledge, to which are attached the argumentation and presentation. Attendance and participation are also factors to consider.

Students with a grade of less than 10 in Continuous Assessment can register for a 1st or 2nd call exam, which will consist of a written test.

Students with a grade higher than 10 in Continuous Assessment can register for a 1st or 2nd call exam, which will consist of presentation of evaluation elements of the semester and their respective improvement proposals.

## Demonstration of the coherence between the Teaching methodologies and the learning outcomes

Interaction design is a study about shared and reciprocal behaviors between a user and a physical constitution. In this sense it is important to define and implement a work process that considers

the situation of use, strategies to interact and stakeholders. Thus it is beneficial to analyze the processes already used, its implementation or fitness. The development of projects will allow the accumulation of experience to be confronted with reference examples.

## Main Bibliography

- Buxton, B 2007, Sketching user experiences: getting the design right and the right design, Morgan Kaufman, San Francisco.
- Cooper, A, Reimann, R & Cronin, D 2007, About face 3: the essentials of interaction design, Wiley Publishing, Indianapolis.
- Dubberly,H., Haque,U., Pangaro,P. 2009 'What is interaction? Are there different types?. in <http://www.dubberly.com/articles/what-is-interaction.html>
- Höök, K & Löwgren, J (2021). Characterizing Interaction Design by Its Ideals: A Discipline in Transition, *She Ji: The Journal of Design, Economics, and Innovation*, 7(1): 24-40. Moggridge, B 2007, Designing interactions, The MIT Press, Cambridge and London.
- Moggridge, B 2007, Designing interactions, The MIT Press, Cambridge and London.
- Saffer, D 2007, Designing for interaction: creating smart applications and clever devices, 2nd edition, New Riders, Berkeley, California.
- Tidwell, J. (2011). Designing Interfaces: Patterns for Effective Interaction Design (2nd Ed.). O'Reilly

## Additional Bibliography

- Arvola, M. & Artman, H. (2007) Enactments in Interaction Design: How Designers Make Sketches Behave. *Artifact*, 1(2): 106-119.
- Blauvelt, A (2008) 'Towards relational design', *Design Observer*, acedido 20 Mar 2009, <<http://www.designobserver.com/archives/entry.html?id=38845>>.
- Blevis, E. & Stolterman, E. (2008) The Confluence of Interaction Design & Design: From Disciplinary to Transdisciplinary Perspectives. Proceedings of DRS2008, Design Research Society Biennial Conference, Sheffield, UK, 16-19 July, 344/1--12.
- Bolter, J & Gromala, D (2003) 'Text rain: the digital experience', in Windows and mirrors: interaction design, digital art, and the myth of transparency. MIT Press, Cambridge MA. Bonsiepe, G 1999, Interface: an approach to design, Jan van Eyck Akademie, Maastricht.
- Bruinsma, M (1999) An ideal design is not yet, acedido 26 Nov 2008, <<http://www.maxbruinsma.nl/index1.html?ideal-e.html>>.
- Davis, M (2008) 'Toto, I've got a feeling we're not in Kansas anymore...' *Interactions* XV(5), 28-34.
- Durrant A. C., Vines J., Wallace J., Yee, J. (2017) Research Through Design: Twenty-First Century Makers and Materialities. *Design Issues*: 33(3).
- Engelbart. D C (1962) Augmenting human intellect: a conceptual framework, Stanford Research Institute, Menlo Park, California, acedido 16 Dez 2010, <<http://dougengelbart.org/pubs/augment-3906.html>>.
- Giaccardi E. (2019) Histories and futures of research through design: From prototypes to connected things. *International Journal of Design*, 13(3), 139-155.
- Hallnas, L & Redstrom, J (2006) Interaction design: foundations, experiments, The Interactive Institute, The Swedish School of Textiles, University College of Boras, Boras.
- Heeter, C (2000) 'Interactivity in the context of designed experiences', *Journal of Interactive*

- Advertising, 1(1). American Academy of Advertising, pp.4-15, acedido 5 Mai 2010, <<http://jiad.org/article2>>.
- Hubner, M & Klaten, R (eds.) (2008) Fully booked: cover art and design for books. Die Gestalten Verlag, Berlin.
- Interaction Design Association, <<http://www.ixda.org>>.
- Interaction Design.org, <<http://www.interaction-design.org>>.
- Manovich, L (2001) The language of new media, MIT Press, Cambridge and London.
- Mugge, R, Schifferstein, H & Schoormans, J (2004) Personalizing product appearance: the effect on product attachment, Delft University of Technology, The Netherlands, acedido 13 Fev 2008, <<http://static.studiolab.io.tudelft.nl/gems/mugge/MuggeDE2004.pdf>>.
- Neves, M (2013) 'Printed Interactivity Towards a new understanding of graphic design', Iridescent: Icograda Journal of Design Research, 2(2).
- Norman, D (2004) Emotional design: why we love (or hate) everyday things. Basic Books. New York.
- O'Reilly, T (2005) What is Web 2.0: design patterns and business models for the next generation of software, acedido 21 Out 2010, <<http://oreilly.com/web2/archive/what-is-web-20.html>>.
- Richards, R (2005) 'Users, interactivity and generation', New Media and Society, 8(4), Sage Publications, pp. 531-550.
- Salonen, E (2010) Common interest: documents: design and format solutions for the arts, culture, academia and charities, Index Book, Barcelona.
- Stolterman, E. (2008) 'The nature of design practice and implications for interaction design research'. International Journal of Design 2(1), 55-65.
- Tapia, A (2003) 'Graphic design in the digital era: the rhetoric of hypertext', Design Issues, 19(1), The MIT Press, pp.5-24, acedido via JStor, 1 Fev 2010. T
- Tapscott, D (2009) Grown up digital: how the net generation is changing your world, McGraw Hill, New York.
- Wiberg, M (2018). The Materiality of Interaction: Notes on the Materials of Interaction Design. MIT Press, Cambridge, MA.