



FICHA DE UNIDADE CURRICULAR

Unidade Curricular

201821008 - Design Emocional

Tipo

Obrigatória

Ano lectivo

2024/25

Curso

Mestrado Design de
Interação

Ciclo de estudos

2º

Créditos

3.00 ECTS

Idiomas

Português

Periodicidade

semestral

Pré requisitos

Ano Curricular / Semestre

1º / 2º

Área Disciplinar

Design

Horas de contacto (semanais)

Teóricas	Práticas	Teórico práticas	Laboratoriais	Seminários	Tutoriais	Outras	Total
0.00	0.00	1.50	0.00	0.00	0.00	0.00	1.50

Total Horas da UC (Semestrais)

Total Horas de Contacto
21.00

Horas totais de Trabalho
75.00

Docente responsável (nome / carga lectiva semanal)

Paulo Ignácio Noriega Pinto Machado

Outros Docentes (nome / carga lectiva semanal)

Paulo Ignácio Noriega Pinto Machado 1.50 horas

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

1. Compreensão dos processos mentais envolvidos nas emoções e sua relação com design;
2. Compreender a relação entre a componente emocional associada à relação com o produto/serviço e a preferência do produto por parte dos utilizadores;

3. Aplicar técnicas de avaliação das emoções geradas pela interação com o produto/serviço.

Conteúdos Programáticos / Programa

1. Objecto de estudo e aplicações do Design Emocional no Design de Interação e sua relação com a User Experience;
2. Além da funcionalidade, o apelo emocional e a irresistibilidade do produto/serviço;
3. Psicologia das emoções;
4. Abordagens categoriais e axiais das emoções;
5. A multiplicidade de dimensões do design e das emoções;
6. Técnicas de avaliação das dimensões emocionais e user experience na interação do utilizador com o produto/serviço.

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

A experiência emocional é complexa e funciona a diversos níveis físicos e psicológicos. É necessário compreender esta experiência e compreender a relação biunívoca entre emoção e cognição. Naturalmente esta relação complexa reflete-se nas interações entre um utilizador e um determinado produto ou sistema que também pode desencadear diferentes tipos de emoções. Compreender esta relação e saber quais as formas de a avaliar são fundamentais na *user experience* e no design de interação.

Metodologias de ensino (avaliação incluída)

Aulas expositivas e exercícios de aplicação de técnicas de avaliação da componente emocional da User Experience.

A avaliação será realizada através de trabalhos de grupo (50% da nota) e de um trabalho individual (50%). Os trabalhos de grupo são realizados em aula, onde se aplicam diversas técnicas de avaliação da *user experience* relacionada com as emoções. A componente individual consiste na realização da avaliação das componentes emocionais da *user experience* num projecto em desenvolvimento pelos alunos noutra unidade curricular do 2º semestre. (Ex: Projeto de interação II, interfaces ou Jogos Digitais).

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

Os conceitos base serão explorados por método expositivo seguido de discussão. Os alunos devem aplicar em aula os conhecimentos adquiridos como também, posteriormente, aplicar esses conhecimentos individualmente num projecto que esteja a decorrer.

Bibliografia Principal

Damasio, A. (1994) O Erro de Descartes. Lisboa: Europa América.

Norman, D.A. (2004). Emotional design: Why we love or hate everyday things. Basic Books: New York

Walter, A. (2011). *Designing for emotion* (pp. 978-1). New York: A book apart.

Bibliografia Complementar

Desmet, P., & Hekkert, P. (2007). Framework of product experience. *International journal of design*, 1(1), 57-66.

Desmet, P., Overbeeke, K., & Tax, S. (2001). Designing products with added emotional value: Development and application of an approach for research through design. *The design journal*, 4(1), 32-47.

Eysenck, M. & Keane, T. (2020). Cognitive psychology: a student's handbook. Routledge: New York.

Gleitman, H., Fridlund, A.J., & Reisberg, D. (2014) Psicologia. Fundação Calouste Gulbenkian: Lisboa

Helander, M. G., & Khalid, H. M. (2006). Affective and pleasurable design. *Handbook of human factors and ergonomics*, 3, 543-572.

Jordan, P. W. (1998). Human factors for pleasure in product use. *Applied ergonomics*, 29(1), 25-33.

Khalid, H. M., & Helander, M. G. (2006). Customer emotional needs in product design. *Concurrent Engineering*, 14(3), 197-206.

Laurans, G. F. G., Desmet, P. M., & Hekkert, P. P. (2009). Assessing emotion in interaction: some problems and a new approach. In *Proceedings of the 4th International Conference on Designing Pleasurable Products and Interfaces, DPPI'09, Compiègne, Oct. 2009*. Université de Technologie de Compiègne.

Liedgren, J., Desmet, P. M., & Gaggioli, A. (2023). Liminal design: A conceptual framework and three-step approach for developing technology that delivers transcendence and deeper experiences. *Frontiers in Psychology*, 14, 1043170.

Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition and emotion*, 23(2), 209-237.

Norman, D. A., (2013). The design of everyday things: revised and expanded edition. Basic Books: New York?

Norman, D. A. (2023). *Design for a better world: Meaningful, sustainable, humanity centered*. MIT Press.

Norman, D., & Euchner, J. (2023). Design for a Better World: A Conversation with Don Norman. *Research-Technology Management*, 66(3), 11-18.

Roald, T. (2007). Cognition in Emotion: An Investigation through Experiences with Art. Editions

Rodopi B.V: Amsterdam

Wells, M. (2003). In Search of the Buy Button; What makes some products irresistible? Neuroscientists are racing to find out and pass the answer along to marketers. *Factiva TM Forbes*. 62, V, 171, 17.

Xue, H., Desmet, P. M., & Fokkinga, S. F. (2020). Mood granularity for design: Introducing a holistic typology of 20 mood states. *International Journal of Design*, 14(1), 1-18.



CURRICULAR UNIT FORM

Curricular Unit Name

201821008 - Emotional Design

Type

Compulsory

Academic year

2024/25

Degree

Master Interaction Design

Cycle of studies

2

Unit credits

3.00 ECTS

Lecture language

Portuguese

Periodicity

semester

Prerequisites

Year of study/ Semester

1 / 2

Scientific area

Design

Contact hours (weekly)

Tehoretical	Practical	Theoretical-practicals	Laboratory	Seminars	Tutorial	Other	Total
0.00	0.00	1.50	0.00	0.00	0.00	0.00	1.50

Total CU hours (semester)

Total Contact Hours

21.00

Total workload

75.00

Responsible teacher (name /weekly teaching load)

Paulo Ignácio Noriega Pinto Machado

Other teaching staff (name /weekly teaching load)

Paulo Ignácio Noriega Pinto Machado 1.50 horas

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

1. Understanding the mental processes involved in emotions and their relationship to design;
2. Understand the relationship between the emotional component associated with the relationship with the product / service and the preference of the product by users;
3. Apply techniques to assess emotions generated by interaction with the product / service.

Syllabus

1. Object of study and applications of Emotional Design in Interaction Design and its relationship with User Experience;
2. More than functionality, the emotional appeal and irresistibility of the product / service;
3. Psychology of emotions;
4. Categorical and axial approaches to emotions;
5. The multiplicity of dimensions of design and emotions;
6. Techniques for assessing user experience and emotional dimensions in user interaction with the product / service.

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

Emotional experience is complex and works at various physical and psychological levels. It is necessary to understand this experience and to understand the biunivocal relationship between emotion and cognition. Of course this complex relationship is reflected in the interactions between a user and a particular product or system that can also trigger different types of emotions. Understanding this relationship and knowing which forms to evaluate it are fundamental in user experience and interaction design.

Teaching methodologies (including evaluation)

Expository classes and exercises to apply techniques to evaluate the emotional component of User Experience.

The evaluation will be carried out through group work (50% of the grade) and individual work (50%). Group work is carried out in class, where various techniques for evaluating the user experience related to emotions are applied. The individual component consists of the evaluation of the emotional components of the user experience in a project under development by the students in other curricular unity of the 2nd semester (Ex: Interaction Project II, interfaces or Digital Games).

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

The basic concepts will be explored by expository method followed by discussion. Students must apply the knowledge acquired in class as well as, subsequently, apply that knowledge individually to an ongoing project.

Main Bibliography

- Damasio, A. (1994) O Erro de Descartes. Lisboa: Europa América.
- Norman, D.A. (2004). Emotional design: Why we love or hate everyday things. Basic Books: New York
- Walter, A. (2011). *Designing for emotion* (pp. 978-1). New York: A book apart.

Additional Bibliography

- Desmet, P., & Hekkert, P. (2007). Framework of product experience. *International journal of design*, 1(1), 57-66.
- Desmet, P., Overbeeke, K., & Tax, S. (2001). Designing products with added emotional value: Development and application of an approach for research through design. *The design journal*, 4(1), 32-47.
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- Gleitman, H., Fridlund, A.J., & Reisberg, D. (2014) Psicologia. Fundação Calouste Gulbenkian: Lisboa
- Helander, M. G., & Khalid, H. M. (2006). Affective and pleasurable design. *Handbook of human factors and ergonomics*, 3, 543-572.
- Jordan, P. W. (1998). Human factors for pleasure in product use. *Applied ergonomics*, 29(1), 25-33.
- Khalid, H. M., & Helander, M. G. (2006). Customer emotional needs in product design. *Concurrent Engineering*, 14(3), 197-206.
- Laurans, G. F. G., Desmet, P. M., & Hekkert, P. P. (2009). Assessing emotion in interaction: some problems and a new approach. In *Proceedings of the 4th International Conference on Designing Pleasurable Products and Interfaces, DPPI'09, Compiègne, Oct. 2009*. Université de Technologie de Compiègne.
- Liedgren, J., Desmet, P. M., & Gaggioli, A. (2023). Liminal design: A conceptual framework and three-step approach for developing technology that delivers transcendence and deeper experiences. *Frontiers in Psychology*, 14, 1043170.
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