

# **DXD 2021**

September 2021 - January 2022 Fontys University of Applied Science ICT www.fontys.nl/minorDXD

### -Syllabus -

### Minor Digital Experience Design

Coordinator: Ferry Wonders

September 2021 - January 2022

Fontys University of Applied Science, School of ICT

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### Preface

We are connected to the people we care about, make futile and important decisions and enhance our abilities with the help of technology. To design technology and media is to design everyday life. This raises some important questions. How do we want to live in the future? How can we make sure technology helps us, improves our lives, supports us, in a meaningful way? The future may be hard to predict, but by designing for it we can influence some of it.

In this minor you will develop the skills within the field of Human Centered Design, Intercultural Communication, Critical Design, Storytelling, and Media Theory, that are important to help solve the important questions of the future. This enables you to work on complex challenges in many professional fields and leverage your skills as a digital designer. By looking at issues from an international perspective and by cooperating with international students will learn to see these in a broader context and better understand the impact of your designs.

The title of this minor is Digital Experience Design (DXD), and by that we mean research through design of products or services that involve the use of computer technology, with the goal of finding ways to meaningfully improve the impressions and behaviours occurring in daily life for a pre-defined group of people. Further in this document we may refer to digital products that influence experiences in this way as 'interactive products or services'.

The minor DXD is closely associated with the lectorate Interaction Design. You will benefit from the extensive professional and research experience of the lector and researchers, and the availability of specialist teachers. In addition, partner companies of the lectorate collaborate with teachers and students of the minor in order to provide meaningful educational cases and context. This way, you and your fellow students learn a lot about doing applied research and build new ties with the professional community.

## Course overview

### **Didactics & process**

#### **Educational activities**

Duration	20 weeks
Contact hours	15-20 hrs per week
Study load	30 ECTS
When	September 2020 – January 2021 The minor is only offered in the fall semester
Location	Eindhoven
Subjects	Human Centered Design, Intercultural Communication, Critical Design, Storytelling, Media Theory

You are offered weekly lessons and workshops on the above subjects, as well as tutoring on the Design Challenge group project. The course material for Intercultural Communications will be integrated in the Human Centered Design courses and Design Challenge as you will collaborate in international teams.

During the semester, you will build a digital portfolio in which you document your personal process and contribution towards the group work as well as individual work on the subjects, in order to prove you meet the learning goals as mentioned below (*see addendum B: Learning outcomes overview*). For each subject the teacher can provide suggestions on request about which works to include in the portfolio. The portfolio can take the shape of a website or similar and can contain videos, photos, sketches, stories, prototypes, etc. The portfolio also contains a short reflection for each iteration, on your work, professional competence and learnings.

During this minor we will work in an iterative process on one or two group projects, as well as individual exercises.

#### Semester Coach

During the semester you will be assigned to one of the teachers from the minor team to coach you during the semester on your personal professional competences in research, learning and communication. To do so, you are in the lead and responsibility for feedback on progression is in your own hands. Also, the semester coach will be your 'go-to', might you have any questions, challenges or problems that you would like to address.



### **Assessments & minor certificate**

### All subjects including the Design Challenge

In two formative assessments during the semester, you are assessed on the learning goals below by means of your personal portfolio about the work you produced, in preparation for the final assessment. At each formative assessment, the team of teachers provide you with feedback on subject-specific learning goals and professional development. You are automatically enrolled in these assessments.

You conclude the minor with one final summative assessment consisting of a portfolio review and interview by the assessor committee (consisting of the team of teachers), assessing your achievements on the learning goals below. This final assessment is the only formal, summative assessment in this minor. A sufficient (or good or excellent) assessment will be rewarded with the full 30 ECTS. In case of an insufficient assessment, you will have the opportunity to take a resit in week 19.

#### Caesura

To pass the final assessment, all subjects need to be graded at least sufficient, or good/excellent at the final assessment. In exceptional cases, for example where the student has achieved insufficient results on one subject but excelled in others, this rule can be waived by the teachers. The assessor committee decides if this exception is granted.

#### Learning outcomes

The learning outcomes and assessment criteria are defined at a sufficient level if met as such at the final assessment. To receive a higher reward (good/excellent), you are free to develop yourself and your work further in the direction that you find the most meaningful and important, or that you discover fit your talents best, and thus maximise your learnings and professional development. Good results have some characteristics in common: the work is recognised as good by relevant organisations or people outside the assessment committee; and reflected upon in-depth on effects and ethics. Excellent results exceed the good results on the following: the work is superseding the practical level; and is innovative in one or more or more areas of the subject matter, digital experience design or its methods.

#### Exposition and minor certificate

To conclude the minor you will present your project during the symposium ICT in Practice in week 20. It is the final presentation of your project for a broad target audience, consisting of external visitors, stakeholders of your project, companies, lecturers and fellow students. To celebrate your project and the finalization of the minor the certificates of the minor – when applicable in your situation – will be handed out.

#### Resit

Might the portfolio be insufficient during the semester and this insufficiency is not improved on enough in later iterations, students are offered a repair possibility at the end of the semester in the form of an additional assignment and assessment to allow the student to show that they have been able to meet the learning goals and criteria for the minor. It is not possible to take a resit on subjects that are graded sufficient/good/excellent.



## Adjustments after input from student evaluations

The minor curriculum is evaluated every semester by its students by means of a questionnaire and plenary discussion under the guidance of the minor coordinator. The student evaluation of previous executions of the minor provided input to improve several aspects:

- a. The online learning environment supported many ways of communicating. It was easy to lose focus of important and less important information. The course information will now be shared within clear communication channels and divides at least the content of workshops, important announcements, and project meetings.
- b. The weekly schedule will be shared with the students and followed by a short Q&A session to get clarification on the content.
- c. It should be clear when you're allowed to work on location and when not.
   Within this semester all days on campus are predetermined in the schedule.
- d. With the Midterm reviews, teachers will reflect on the different learning outcomes, including the professional competences, to get a full overview of the current status-quo of its portfolio and personal development.
- e. Masterclasses and guest lectures where very appreciated. Beside the workshops derived from the courses the Minor will offer more masterclasses and guest lectures.

### **Teachers**



Judith Gaffert <u>j.gaffert@fontys.nl</u> Story Creation



Ferry Wonders <u>f.wonders@fontys.nl</u> Interaction Design Minor coordinator



Eveline van de Garde-Perik <u>e.vandegarde@fontys.nl</u> Human Centred Design Intercultural Communication



Woody Veneman w.veneman@fontys.nl Critical Design



Suzanne van Kuijk <u>s.vankuijk@fontys.nl</u> Media Theory

## Learning Outcomes

### **Design Challenge**

#### Subject

In cooperation with the lectorate Interaction Design and Partners in Innovation we have developed a Design Challenge about digital experience in a future context which allows for different approaches. By working on this challenge in an iterative way with your group you learn to understand the complexity that lies beneath and how your skills as a digital designer can make a meaningful contribution.

This year we have a few different, exciting possibilities for the content and clients for the Design Challenge. The Design Challenge will be described during the kick-off in the first week and is the main challenge. At the minor kick-off we will present the definitive planning and Design Challenge(s).

In the subject Human Centered Design you work on this Design Challenge, and the other subjects will also regularly feed into the Design Challenge. The process of the Design Challenge will be cycles of inspiration, ideation and implementation, realizing different prototypes of a meaningful interactive product/service. You work in teams of 4-6 persons with different (cultural) backgrounds. We describe the learning outcomes for the Design Challenge as follows\*:



The student applies the **Human Centered Design process** to solve a practical problem (design challenge).

### The student **creates meaningful** interactive products and/or services in response to the Human Design Process.

\* See addendum B for the assessment criteria corresponding with the learning outcomes.

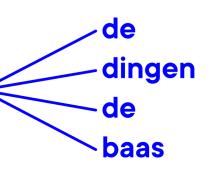
### Methodology

During the semester you will work in your group in an iterative process, each consisting of inspiration, ideation and implementation. Weekly consults are offered by your tutor to provide formative feedback. All teachers will provide training in their subjects to practise the necessary skills and provide formative feedback on the Design Challenge. There are 3 iterations in 20 weeks.

#### **Tutoring**

The class will be offered a weekly consult with your tutor. He/she will guide you and your team during your process of inspiration, ideation and implementation. The tutor will also help integrate the skills and knowledge from the other DXD subjects into the Design Challenge. The tutor and the team of teachers will assess each individual during the assessments which are organized 3 times per semester.

- ★ Dorst K., Kaldor L., Klippam L., Watson R (2016). Designing for the Common Good. BIS Publishers, Amsterdam
- ★ Hassenzahl, M. (2010). Experience design: Technology for all the right reasons. Synthesis Lectures on Human-Centered Informatics.
- ★ Stickdorn, M., & Schneider, J. (2010). This is Service Design Thinking. Basic-Tools-Cases. BIS Publishers, Amsterdam
- ★ Verschoor C., (2015). Change Ahead How research and design are transforming business strategy. BIS Publishers, Amsterdam



### **Professional Competence**

#### Information

During the semester, you will work together with other students, companies, teachers. In your portfolio, you reflect on your professional competence in these settings and projects. Your Semester Coach can give you feedback and guidance if needed. We describe Professional Competence as follows\*:

### The student **reflects** on its own professional competence in learning and intercultural communication through their work.

\* See addendum B for the assessment criteria corresponding with the learning outcomes.

## Course Content

### **Human Centered Design**

### Subject

In the subject HCD you will learn to apply different approaches to human-centered design or HCD (eg. IDEO Field Guide, Value Proposition Design, Research through Design) to iteratively develop innovative products or services. The HCD process consists of 3 phases: Inspiration, Ideation and Implementation. During the first iteration of the project you will become familiar with how to apply these steps. Subsequently you will repeat the three steps in each of the following three iterations. Furthermore, workshops focusing on specific methods of prototyping, user testing and Value Proposition Design will be offered.

The HCD process is applied to the Design Challenge and is assessed on your individual contribution to the group project.

- ★ IDEO.org (2015). The Field guide to Human-Centered Design. (PDF after registration from <u>http://www.designkit.org/resources/1</u>)
- ★ Koskinen, I., Zimmerman, J., Binder, T., Redstrom, J., & Wensveen, S. (2011). Design research through practice: From the lab, field, and showroom. Elsevier (Book)
- ★ Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, Alan Smit (2015). Value Proposition Design: How to Create Products and Services Customers Want. John Wiley & Sons. <u>https://strategyzer.com/value-proposition-design</u> (Preview at <u>https://books.google.nl/books?id=jgu5BAAAQBAJ</u>)
- ★ Dorst, K., Kaldor, L., Klippan, L., & Watson, R. (2016). Designing for the common good: a handbook for innovators, designers, and other people.

### **Intercultural Communications**

#### Subject

During this semester you will communicate within multicultural teams and collaborate in one or more international project(s) to develop intercultural awareness.

The Intercultural Communications course provides theoretical, research and practical training in areas of international and intercultural communication and the media. It combines theory and practice.

With this course you are examining your own socialization, self-image and motivation and you gather knowledge about your own cultural baggage. You share your reflections and vision on intercultural processes.

- ★ Hofstede Insights. The 6-dimensional model <u>http://www.hofstede-insights.com</u>
- ★ Bennett, M. J. (2004). Becoming interculturally competent. Toward multiculturalism: A reader in multicultural education, 2, 62-77.



### **Media Theory**

### Subject

During the lectures of Media Theory we will explore how media have evolved and how this affects the design of media. We will use Daniel H. Pink's book to explore six themes that allow us to dive into the conceptual age, and we will discover how these themes affect media design in this digital age. Research by you and your team will result in a theoretical and practical overview that helps you in designing solutions for the design challenge.

- ★ Pink, D. H. (2006). A whole new mind: Why right-brainers will rule the future. Penguin
- ★ Verbeek, P. P. (2011). Moralizing technology: Understanding and designing the morality of things. University of Chicago Press.
- ★ Verbeek, P. P. (2015). COVER STORY Beyond interaction: a short introduction to mediation theory. *interactions*, 22(3), 26-31.
- ★ Bolter, J. D., Grusin, R., & Grusin, R. A. (2000). *Remediation: Understanding new media.* mit Press. Belk, R. W. (1988).
- ★ Possessions and the extended self. Journal of consumer research, 15(2), 139-168.



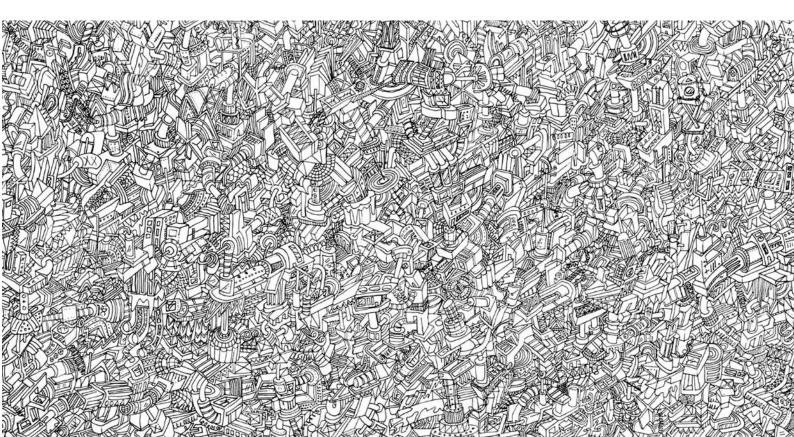
### **Story Creation**

### Subject

You will learn about cognitive psychology and neuroscience related to storytelling. You will learn about the implicit frameworks that must underlie a story, to ignite the reader's brain.

### Helpful resources

★ Cron, L. (2012). Wired for Story: The Writer's Guide to Using Brain Science to Hook Readers from the Very First Sentence. Ten Speed Press. <u>https://books.google.nl/books?id=wpjF2yplDrsC</u>



### **Critical Design**

### Subject

Critical Design uses speculative design proposals to challenge narrow assumptions, preconceptions and givens about the role products play in everyday life. It is more of an attitude than anything else, a position rather than a method. Its opposite is affirmative design: design that reinforces the status quo.

In this subject you will create a personal manifesto and realise your own Critical Design work. This work will be presented at one or more exhibitions created and organised by the students.

- ★ Dunne, A., & Raby, F. (2013). *Speculative everything: design, fiction, and social dreaming*. MIT Press. <u>https://books.google.nl/books?id=9gQyAgAAQBAJ</u>
- ★ Dunne, A., & Raby, F. (2001). Design noir: The secret life of electronic objects. Springer Science & Business Media. <u>http://www.dunneandraby.co.uk/content/projects</u>
- ★ Sudjic, D. (2009). The Language of Things Design, Luxury, Fashion, Art: How We are Seduced by the Objects Around Us. Penguin Books Ltd
- ★ Antonelli, P. (2015) Design and Violence. Museum of Modern Art. <u>http://www.moma.org/momaorg/shared/pdfs/docs/publication\_pdf/3220/MoMA\_DesignAndViolence\_PREVIEW.pdf</u>



# Addendum A:

### **Outline Planning\***

FONTYS WEEK	DATE	WHAT?
1	30/08	KICK-OFF & INTRO LECTURES
2	06/09	LECTURES / THEME WEEK
3	13/09	LECTURES / INT. COLLABORATION
4	20/09	LECTURES / INT. COLLABORATION
5	27/09	LECTURES / INT. COLLABORATION (28/11 STUDY DAY**)
6	04/10	LECTURES / INT. COLLABORATION
7	11/10	LECTURES / GROUP PROJECT
8	18/10	LECTURES / GROUP PROJECT
Fall Break	25/10	HOLIDAY
9	01/11	LECTURES / GROUP PROJECT
10	08/11	DEMO 1 + ASSESSMENTS LECTURES
11	15/11	LECTURES / GROUP PROJECT (15/11 STUDY DAY**)
12	22/11	LECTURES / GROUP PROJECT
13	29/11	LECTURES / GROUP PROJECT
14	06/12	DEMO 2 + ASSESSMENTS
15	13/12	LECTURES / GROUP PROJECT
16	20/12	LECTURES / GROUP PROJECT (23-24/12 STUDY DAYS**)
Holidays	27/12 - 07/01	HOLIDAY
17	11/01	LECTURES / GROUP PROJECT
18	17/01	DEMO 3 + ASSESSMENTS
19	24/01	RESIT
20	31/12	SYMPOSIUM + MINOR CERTIFICATES HAND-OUT CELEBRATION

\* Planning is included to give an overview of the semester; subject to change. Check the most recent version on Canvas.

\*\* There are no lectures during study days

## Addendum B: Learning outcomes overview

#### Design challenge

	The quality of the work is <u>sufficient</u> when the student has shown to:
You apply the <b>Human Centered</b> <b>Design process</b> to solve a practical problem (design challenge).	<ul> <li>Human Centered Design process: in all phases of a methodical design process:</li> <li>You define useful research questions and subquestions for a practical problem;</li> <li>You independently select research methods and extensively involve end-users in a methodical way, and execute the chosen research methods correctly resulting in prototypes in increasing levels of fidelity;</li> <li>You will present end-results in a 2-page research paper and visualised in an A1 poster as end-result for the design challenge</li> <li>This process is iterated upon as stated by the semester planning.</li> </ul>
You <b>create</b> <b>meaningful</b> interactive products and/or services in response to the Human Design Process.	<ul> <li>Meaningful creation:</li> <li>You create - in each iteration of the design process - meaningful interactive products/services that have proven added value for the end-user (based on Human Centered Design process);</li> <li>Create interactive products/services based on your research results: In each iteration, you create prototypes of interactive products or services in increasing levels of fidelity (low/mid/high fidelity) and present them during demo's and in your portfolio (pdf / url / movie etc.).</li> <li>You can reason about chosen mediation and have a vision on how media is affecting the digital age and reason/argument (media theory);</li> <li>The interactive product embodies a meaningful story () for the user-group based on emotion-based storytelling that leads to a predetermined interpretation (story creation);</li> <li>Your work fits the definitions of critical design by Dunne &amp; Raby (Speculative Everything, p vii, 2013) (critical design) ()</li> </ul>

### Professional competences

	The quality of the work is <u>sufficient</u> when the student has shown to:
You <b>reflect</b> on your own professional competence in learning and intercultural communication through your work.	<ul> <li>Reflect: each iteration you will improve your skills in <u>a self-chosen medium included in your portfolio</u> (e.g. blogpost, video, poster, word doc, etc.).</li> <li>You reflect on what you've learned per iteration on your professional talents and development ambitions in relation to the IT profession;</li> <li>You reflect on own socialization, self-image and motivation and knowledge about own cultural baggage (intercultural communication)</li> <li>You reflect on professional competence in different intercultural models and have a vision on working in intercultural groups;</li> <li>Whilst responsible for individual tasks, you can collaborate with others in an effective way in an international and intercultural context (both written as verbally with your peers and stakeholders) (intercultural communication).</li> </ul>