

# ID5070 Deep Dive

Course Manual  
Edition Fall 2017

Delft University of Technology  
Faculty of Industrial Design Engineering Landbergstraat 15  
2628 CE Delft  
The Netherlands

## COURSE STAFF

### COURSE COORDINATOR

**dr. Roy Bendor**

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room: 32-C-3-210

(for course content-specific matters e.g. admission, criteria etc.)

### COURSE ADMINISTRATION for the FALL 2017 EDITION

**prof.dr. Pieter Jan Stappers**

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room: 32-C-3-130 (by appointment only)

phone: 015-27 85202

**prof.dr. Quan Zhou**

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room: 32-C-3-100

(for organisational and content matters e.g. groups, locations, Brightspace, illness, etc.)

## GENERAL: The Deep Dive Format

The course gives students and faculty an opportunity to review and discuss key literature in a societal or research area relating to new developments in design. The course consists of at least 7 meetings in which staff or students present a piece of literature, and a discussion is held.

### COURSE ORGANIZATION

Topics may come from staff members or students. A course can take place if a staff member and at least 5 students agree on a joined interest on the topic. This agreement should be reached before the course starts, maybe using a market event, possibly preceded by topic suggestions. Each coach specifies 5 seminal articles for 'his/her' topic to be read before the first meeting, so that students have a similar basic level of starting knowledge. Each student should then gather additional literature/info.

### PLACE OF THE COURSE IN THE CURRICULUM

The DeepDive elective fits into Semester 3. It builds on techniques of academic writing and argumentation as taught in the first year of the Master programmes. Each edition focuses on a topic that is linked to current research interests of teachers and students.

### LEARNING OBJECTIVES

The general objectives of Deep Dive are about dealing with scientific literature and argumentation:

1. Students attain competences in literature retrieval skills.
2. Students attain working knowledge of a relevant domain.
3. Students learn/consolidate presentation and discussion skills.

For each edition, the content objectives can be specific.

## FALL 2017 EDITION: Designing for(?) User Bias

### CONTENT OBJECTIVES

Upon completion of the course, students will be able to:

- Understand key cognitive theories of biases in decision making.
- Evaluate practical and ethical issues regarding biases.
- Analyse existing interfaces for such biases.
- Improve existing designs in the light of such biases.

### COURSE MATERIALS

Required Books: these are mandatory. Both are bestsellers available through online and regular bookstores.

- Gladwell, M. (2007). *Blink: The power of thinking without thinking*. Back Bay Books.
- Kahneman, D. (2011). *Thinking, fast and slow*. Macmillan.

Inspiring TED Talks about biases

- Barry Schwartz, the paradox of choice. <https://youtu.be/VO6XEQIsCoM>
- Barry Schwartz, the way we think about work is broken. [https://youtu.be/3B\\_1itqCKHo](https://youtu.be/3B_1itqCKHo)
- Shlomo Benartzi, saving for tomorrow, tomorrow [https://youtu.be/gzcw\\_02ZB1o](https://youtu.be/gzcw_02ZB1o)
- Patti Dobrowolski. Draw your Future. <https://youtu.be/4vl6wCiUZYc>

Some further reading

- Klein, G. (2013). *Seeing what others don't: The remarkable ways we gain insights*. PublicAffairs.
- Kay, J. (2011). *Obliquity: Why our goals are best achieved indirectly*. Profile Books.
- Levitin, D. (2014) *The Organized Mind*. Penguin.
- Lindblom, C. E. (1959). The science of 'muddling through'. *Public administration review*, 79-88.
- Lindblom, C. E. (1979). Still muddling, not yet through. *Public administration review*, 39(6), 517-526.
- Norman, D. A., & Stappers, P. J. (2016). DesignX: Complex Sociotechnical Systems. *She Ji: The Journal of Design, Economics, and Innovation*, 1(2), 83-106.
- Tromp, N., & Hekkert, P. (2012). Designing Behavior. *Design and Anthropology*, 193-206.

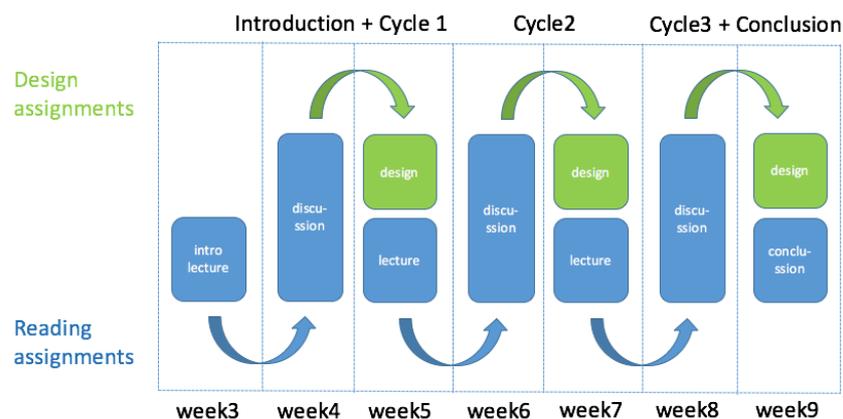
## STRUCTURE

The course consists of individual homework, and weekly meetings which take place from 13:45-17:30 on Wednesdays.

The weeks are divided over three two-week cycles of activities:

1. Introduction lecture, at the end of an afternoon, followed by reading homework, then at the next meeting:
2. Presentation of literature findings
3. Discussion in group(s)
4. Introduction of design assignment (at the end of the afternoon), followed by design homework, then at the next meeting:
5. Presentation of design findings

The cycles are chained together for the duration of the quarter (see image below)



Students are expected to prepare for each meeting, and actively take part in presentations and discussions. Contributions may take several forms:

- Questions on the literature that is read;
- Presentations summarizing literature or providing design examples;
- Active participation in the group discussion;
- Presentations of a design proposal (i.e., a principle, a concept, not a complete design).

The presentations should be supported by documentation which together form the student's course portfolio, handed in at the end of the course.

## STUDENT RESPONSIBILITIES

The course requires that you come prepared for each meeting, actively take part in the presentations and discussions, and submit parts of your portfolio digitally. How students should act regarding attendance, illness, etc. is described under 'policy information' below.

## WHAT TO EXPECT FROM THE TEACHERS

The teachers will prepare instructions and facilitate discussions. They are available during the weekly meeting, and can be contacted by email for questions.

## ASSESSMENT

Students will be evaluated by both teachers based on their 'contributions' (mentioned in section 'STRUCTURE' above). This includes both the 'live' part during the meetings, and the 'written' part in the portfolio.

## BRIGHTSPACE

The course makes use of Brightspace for delivering content and managing student contributions. In order to avoid last minute surprises, students are expected to familiarise themselves with the platform.

## RULES & POLICY INFORMATION

### **Policy for attendance**

Meetings with presentation and discussions are the core part of the course. Every participant in the course is expected to attend all meetings. When urgent matters require absence, this should be agreed on by the teachers beforehand.

### **Policy for late work**

Late work will be evaluated where possible.

### **Policy for fraud**

Free-riding is considered fraud, as is presenting other people's ideas as your own. If a participant's contribution is found lacking, this will affect his or her grade.

### **Policy for illness**

For incidental illness, students are responsible to inform the teachers and together work out a solution. If circumstances are such that multiple courses are affected over a longer time, we recommend that an academic Councilor is consulted to help create the broader solution. In these cases, staff will work with the Board of Examiners and Academic Councilors to optimize the recovery of student's progress.

### **Course manual changes policy**

Changes and errors in this manual will be announced on Brightspace.

## Appendix – the course description from CourseBase

Course browser searcher

10/09/17 22:49

2017/2018 ID5070	Industrial Design Engineering Deep Dive	IO Electives ECTS: 3				
<b>Course Coordinator</b>	<table border="1"> <thead> <tr> <th>Name</th> <th>E-mail</th> </tr> </thead> <tbody> <tr> <td><a href="#">Dr. R. Bendor</a></td> <td><a href="mailto:R.Bendor@tudelft.nl">R.Bendor@tudelft.nl</a></td> </tr> </tbody> </table>		Name	E-mail	<a href="#">Dr. R. Bendor</a>	<a href="mailto:R.Bendor@tudelft.nl">R.Bendor@tudelft.nl</a>
Name	E-mail					
<a href="#">Dr. R. Bendor</a>	<a href="mailto:R.Bendor@tudelft.nl">R.Bendor@tudelft.nl</a>					
<b>Education Period</b>	1 3					
<b>Start Education</b>	1 3					
<b>Exam Period</b>	none					
<b>Course Language</b>	English					
<b>Course Contents</b>	<p>Although people (users and designers) may not act like logic machines, they often exhibit biases: inclinations or prejudices towards particular ways of thinking or doing. In this mode, subtleties in posing a question, formulating a decision, or displaying a choice can have large effects on what people actually do.</p> <p>While such biases may work against designers' intentions, producing surprises and sometimes frustrations, they can also work in beneficial ways. For example: in online forms for soliciting organ donors, Germans had to click a box to become a donor, while Austrians had to click to *not* be a donor. As a result, Germany had 12% donors, but Austria had 99%! So what some may treat as "cognitive defects", others may find "valuable heuristics".</p> <p>In this course we will dive into the literature, gather and discuss examples, and formulate together tips and guidelines for designers to be 'wary of biases' in the interfaces they design. We will dive into work that explores 'cognitive styles', decision making, and 'biases', including Gladwell's "Blink" (2007), Thaler &amp; Sunstein's "Nudge" (2008), Kahneman's "Thinking fast and slow" (2011), and Klein's "Seeing what others don't" (2013).</p> <p>The course will be led by prof. Pieter Jan Stappers (TU Delft) in collaboration with visiting researcher prof. Quan Zhou (University of Minnesota). The course is connected to the research project 'MyFutures,' which aims to help people discuss and make plans for their personal futures (see more on the project <a href="http://www.myfutures.nl">http://www.myfutures.nl</a>).</p>					
<b>Study Goals</b>	<p>Upon completion of the course, students will be able to:</p> <ul style="list-style-type: none"> <li>- Understand cognitive theories of biases in decision making.</li> <li>- Evaluate practical and ethical issues regarding biases.</li> <li>- Analyse existing interfaces for such biases.</li> <li>- Improve existing designs in the light of such biases.</li> </ul>					
<b>Education Method</b>	<p>The course follows the 'Deep Dive' format. It is designed to allow students to delve into a specific design issue with a combination of reading, discussion and customized design assignments.</p> <p>The course comprises three cycles of two weeks each, bookended by an introduction and conclusion session. Each cycle includes a short lecture, followed by reading homework, a seminar-style session with discussion and presentations, and a relevant design assignment and presentation.</p>					
<b>Reader</b>	Relevant reading material will be provided to students.					
<b>Assessment</b>	Students will be evaluated based on the quality of their participation in discussion, short presentations, short essays, and conceptual designs.					
<b>Enrolment / Application</b>	<p>For MSc elective courses registration via the electronic applications system Osiris is compulsory during the registration period in which Osiris is open.</p> <p>Registration for MSc elective courses in the Fall, Quarter 1 and 2 can be made in (approximately) April.</p> <p>Registration for MSc elective courses in the Spring, Quarter 3 and 4, can be made in (approximately) November.</p> <p>Exact registration periods and deadlines are communicated on the website.</p> <p>See <a href="http://www.io.tudelft.nl/osiris">http://www.io.tudelft.nl/osiris</a> for deadlines and details.</p> <p>Registration beyond the registration deadlines is not possible.</p> <p>These rules apply to IDE students as well as to students from outside the IDE faculty.</p>					