

DESIGN RESEARCH TOOLS

COURSE OBJECTIVE

The course objective is to introduce doctoral candidates to the following topics:

1. What is doctoral research;
2. How to start and develop a doctoral research project and write a doctoral thesis;
3. What are the different approaches to doctoral research in design.

COURSE DESCRIPTION

The course is divided in **lectures**, **exercises** and **discussions**.

The **lectures** are structured in three main parts:

- . Part one introduces doctoral research and doctoral thesis;
- . Part two explains the paradigms, methodologies and methods of research;
- . Part three describes the different approaches and processes to doctoral research in design.

The **exercises** help doctoral candidates practice the theoretical arguments presented during the lectures. Three exercises are developed:

- . The first one focuses on identifying and defining the research macro and micro areas, individuating the related critical issues and suggesting what can be done to investigate them;
- . The second one focuses on writing the research abstract and discussing it;
- . The third exercise focuses on developing a visual representation of the possible research phases.

Each exercise is followed by a **discussion** session. During these sessions doctoral candidates support each other by sharing their knowledge, suggesting ideas and advices, and comparing their research topics, processes and objectives.

COURSE GRADING

The course is intended to be an interactive class, and as such participation in questions, exercises and discussions is the main evaluation criteria.

DATES / HOURS / LOCATION

16 October 2014 / 14:00-18:00 / Aula *Azzura*, Design Department, 3rd Floor
23 October 2014 / 14:00-18:00 / Aula *Azzura*, Design Department, 3rd Floor
30 October 2014 / 14:00-18:00 / Aula *Azzura*, Design Department, 3rd Floor
06 November 2014 / 14:00-18:00 / Aula *Azzura*, Design Department, 3rd Floor
13 November 2014 / 14:00-18:00 / Aula *Azzura*, Design Department, 3rd Floor

COURSE OUTLINE

PART 1 – INTRODUCTION TO DOCTORAL RESEARCH

1.1 Research

- 1.1.1 What is research
- 1.1.2 Characteristics of research
- 1.1.3 Kinds of research

1.2 Doctoral research

- 1.2.1 Background
- 1.2.2 The PhD definition
- 1.2.3 The PhD characteristics
- 1.2.4 The PhD objectives
- 1.2.5 The PhD process
- 1.2.6 Psychological aspects

1.3 Doctoral thesis

- 1.3.1 The abstract
- 1.3.2 The structure
- 1.3.3 The contents

PART 2 - METHODOLOGIES AND METHODS OF RESEARCH

2.1 Research paradigms

- 2.1.1 Definition
- 2.1.2 From positivism to participatory
- 2.1.3 Qualitative and quantitative research

2.2 Methodologies of research

- 2.2.1 Definition
- 2.2.2 Strategies of research

2.3 Methods of research

- 2.3.1 Collection methods
- 2.3.2 Analysis methods
- 2.3.3 Interpretation methods

PART 3 – APPROACHES TO DOCTORAL RESEARCH IN DESIGN

3.1 Introduction

3.2 Review of Literature

3.3 Methodology of research

3.4 Plurality of approaches to doctoral research in design

- 3.4.1 Sciences and humanities research approaches - “*research in design*”
- 3.4.2 Practice-based approach - “*research through design*”
- 3.4.3 Practice-centred approach - “*research for design*”

3.5 Discussion: Towards a designerly approach to research

3.6 Conclusion

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- SAIKALY, F., 2004. *Doctoral Research in Design: Towards the Designerly Way*. PhD Thesis. Politecnico di Milano.

*The complete list of references will be provided during the course.

FATINA SAIKALY *biography*

Fatina holds a Bachelor's Degree in Architecture (1997) and a PhD in Industrial Design (2004). She is the Co-Founder and Creative Director of *Co-Creando cocreando.it*, a research, strategy and design studio, and the Founder and Editor-in-Chief of *Sustainable Ideas sustainableideas.it* online magazine. Fatina holds an appointment as a Visiting Professor in Design Research at the School of Design, Politecnico di Milano. Her research and professional interests are: methodologies and methods of design research, social design, design and crafts, and design for sustainable development.
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