

Studyboard for Humanistic Informatics Fall 2014

#### **Semester description**

## 9<sup>th</sup> semester Information Architecture

#### Semester details

School: School of Communication, Art and Technology (CAT)

Study board: Studyboard for Humanistic Informatics

Study regulation:

http://www.fak.hum.aau.dk/digitalAssets/68/68502 curriculum information architecture uk 06.pdf http://www.fak.hum.aau.dk/digitalAssets/88/88235 ka informationsarkitektur 2014.pdf English version is being produced

#### Semester framework theme

This semester focus on a depth theoretical understanding of creating, designing and managing change in organizations. Building on curriculum from previous (8th) semester's work with 3 different cases of design and re-design information architecture taking point of departure in user driven innovation, this semester is designed to develop a broad understanding of the challenges surrounding strategic change, therefore the semester is built on theories, methods and methodologies to manage change in organization and analysis of all its implications.

#### Semester organisation and time schedule

The semester is composed of three modules:

- 1. **Module 5: Strategic Change**, this module provides the theoretical and methodological framework of de theory of change, organizational change and design.
- 2. **Module 6: Design tools**, this module covers different technologies and nontechnological design tools, aiming to provide the students the tools to design strategic changes
- 3. **Module: Persuasion**, the course aims to explore the fields of Persuasive Technologies and Persuasive Design. This is an elective course, therefore the students are allow to choose this course or 2 of the electives course open this semester for Humanistic Informatics.

The semester is organized in a way that the student can build new knowledge based on the knowledge and experience from the last semester. The semester is based on active learning and learning by doing principles. Teaching consists of lectures, cases, field trip, hand on activities and students' project work, therefore the students will have the opportunity to get involved in-depth discussion of the different aspects but also try out some of the methods and methodologies.

## Semester coordinator and secretariat assistance

Module coordinator: Heilyn Camacho: hcamacho@hum.aau.dk Secretary: Louise Mette Møller: T: (+45) 9940 7266 | Email: Imk@hum.aau.dk

## **Module description**

Module title, ECTS credits
Module 7: Strategi for Forandring (Strategy for Change)
15 ECTS
Location
9 <sup>Th</sup> semester
Study board: Humanistic Informatics
Module coordinator
Heilyn Camacho.
Type and language
Project module
English
Objectives
The aim of the module is to provide the theoretical understanding of strategic change in organizations. Furthermore, students will get to know different models of change and methodologies for designing, implementing and managing change.
Professional competences: Through the module the student will attain competence within:

1. Project management in the design of culture-sensitive and multi-medial information architectures

Practical competences: Through the module the student will attain competence in:

- Gaining sympathetic insight into other cultures and perceptions, and in communicating with both specialists and others on professional problems in relation to information architecture
- 2. Communicating design strategies
- 3. Coordinating and co-operating in design processes

## Academic content and basis

The course follows a quite typical AAU structure. The first part of the course has as its objective to allow students to get an overview of existing literature in this field. The field can, simplified, be said to be a combination of business model strategy, public sector management, change management, communications strategy, and design management and design change. Theories that could also be of relevance, but are not in foci, is branding and corporate strategy. Students are expected to read the literature and participate actively, rather than listening to lectures. The latter part of the course is project-based essay writing with supervision. The expected output is a written report that shall have cases from module 4 as their central theme (see also the curriculum). The intention of this learning activity is to develop skills in application of literature, rather than methodological design and application of methods. Hence the project efforts should be spent on writing and analyzing, rather than extensive further empirical enquiry. Furthermore, note that there is no oral defense of the report. However, during the teaching theoretical and methodological aspects will be cover.

## Scope and expectations

The module is organised with 31 lecture hours at campus for which students are expected to prepare for each lecture hour. The process requires both a theoretical depth in the selected

literature, which must be read before the lectures as lectures will not only be a text, but will build on and further thinking in relation to the texts that students have read before. Additionally, students are expected to conduct exercises related to lectures.

Through the semester students conduct a project. In the project work, students deepen their know ledge on strategic change by applying it to the real-life applications developed in semester 8<sup>th</sup>. For the semester project students receive 12 hours of supervision. Students must expect a workload of 412,5 hours for the module (this include lectures, semester project, readings and so on).

## Participants

Students enrolled at the 9th semester Information Architecture

Prerequisites for participation

BA-level in studies accepted by the study board of Humanistic Informatics

# Module activities (course sessions etc.)

All the activities will be held in room 4.105 at Rendsburggade 14.

Lecture 1: Introduction to the semester and the Organizational Learning topic

Date and time: September 1<sup>st</sup>, 2014, from 13:00-16:00 Lecturer: Heilyn Camacho

Literature for the lecture:

- 1. Argyris, C. (1999). On Organizational Learning (Second ed.). Oxford: Blackwell Publishers.
- 2. Argyris, C., & Schön, D. (1996). Organizational Learning II: Theory, Method, and Practice. USA: Addison Wesley Publishing Company.

# Lecture 2: The theoretical landscape of strategy theory

Relationships between the most important discourses: Organisation theory. Strategy theory. Corporate strategy. Normative & descriptive approaches of Strategy Theory. Process vs. Position. Public sector strategy. Stakeholder theory. Enterprise Architecture recap.

Lecturer: Pär-Ola Zander

Literature for the lecture:

1. Hedman, J., & Kalling, T. (2002). IT and business models - concepts and theories. Malmö: Liber ekonomi. Chapter 3-5

# Lecture 3: Applying general strategy theory

Discussing general strategy literature Lecturer: Pär-Ola Zander Literature for the lecture:

- 1. Alford, J. (2001). The implications of "publicness" for strategic management theory. Exploring public sector strategy (pp. 1–13)
- 2. Hedman & Kalling again.

# Lecture 4: Alternatives to the discourse of the business schools

Summing up the Hedman & Kalling perspective. Bottom-up change. Strategic change from the perspective of the humanities.

Lecturer: Pär-Ola Zander

Literature for the lecture:

- 1. Spinuzzi chapter 2: Spinuzzi, C. (2003). Tracing genres through organizations : a sociocultural approach to information design. Cambridge Mass.: MIT Press.
- 2. Hedman & Kallilng business model (chapter 6)
- 3. Skim Lewis: Lewis, L. K. (2011). Organizational change : creating change through strategic communication. Chichester, West Sussex; Malden, MA: Wiley-Blackwell.
- 4. McKendall, M. (1993). The tyranny of Change Organizational development revisited. Journal of Business Ethics, 12(2), 93–104.

# Lecture 5: Design Strategy I

Moving from general concepts of strategy and change, and towards our context - design. Lecturer: Pär-Ola Zander

Literature for the lecture:

- The chapters of Lockwood, McCullagh and Franchino in :Lockwood, T., & Walton, T. (2008). Building design strategy: using design to achieve key business objectives. New York; [Boston, MA]: Allworth Press ; Design Management Institute.
- Verganti, R. (2008). Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda. Journal of Product Innovation Management, 25(5), 436–456. doi:10.1111/j.1540-5885.2008.00313.x)

# Lecture 6: Design Strategy II

Discuss applied change management literature, particularly by Lewis. Lewis as tool for design management.

Lecturer: Pär-Ola Zander

Literature for the lecture:

1. Lewis, L. K. (2011). Organizational change : creating change through strategic communication. Chichester, West Sussex; Malden, MA: Wiley- Blackwell. Chapters: 1-3 and 5

# Lecture 7: Models for change

- a. Kurl Lewin's Change Model
- b. Kotter's 8 step of change
- c. Ackoff's idealized Systems Design

Date and time: Thursday September 18<sup>th</sup>, 2014 from 12:15 to 16:15, room 4.105 Lecturer: Heilyn Camacho Literature for the lecture:

- 1. Schein, E. (1996) Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning. Systems Practice, Vol. 9, No. 1 (Only pages 27-37)
- 2. Ackoff, R.; Magidson, J. and Addison, H. (2006). IDEALIZED DESIGN Creating an Organization's Future. Prentice Hall, USA. Chapter 1 from page 3-25

3. Kotter, J. P. (1996). Leading change. Boston, Mass: Harvard Business School Press

Lecture 8 and 9: Strategies for change-Methodologies

- a. Action learning
- b. Design Thinking
- c. Lego Serious Play
- d. System Thinking

Dates and time:

- 1. Monday September 22nd , 2014 from 12:15 to 16:15
- 2. Thursday September 25th, from 12:15 to 14:00

Lecturer: Heilyn Camacho Literature for the lectures:

- 1. Kristiansen, P. and Rasmussen, R (2014). Building a Better Business Using the Lego Serious Play Method. John Wiley & Sons, New Jersey, USA (buy)
- 2. Brown, Tim. (2008) Design Thinking. Harvard Business Review, June 2008. (available in AUB)
- Marquardt, Michael, and Yeo, Roland K.. Breakthrough Problem Solving with Action Learning : Concepts and Cases. Palo Alto, CA, USA: Stanford Business Books, 2012. ProQuest ebrary. From page 30-60 (online in AUB)
- 4. Revans, R. (1998). ABC of Action Learning (Review edited of 1983 edition ed.). London: Lemons & Crane.

#### Examination

An external written Individual test in: Strategies for Change

The student prepares an essay of not more than 30 pages, which presents, theoretically examines and critically discusses the proposed strategy, taking point of departure in the portfolio notes. A grade according to the 13 point grading scale is given.

In relation to the competence goals stipulated in section 11 the test documents the student's ability:

- To plan and manage the design of culture-sensitive and multi-medial information architectures in a way which demonstrates the ability to achieve sympathetic insight into other cultures and perceptions
- To communicate with both specialists and a wider audience on professional problems in relation to information architecture, and to communicate strategies to all parties involved (end users, commissioners and developers).

The study elements on which test is based are equivalent to 15 ECTS points.

# 5 ECTS Location 9. semester, Information Architecture Study board: Humanistic Informatics Module coordinator Pär-Ola Zander Type and language Study Subject Module English **Objectives** Professional competences: The module will give the student: Basic knowledge of design tools for the design of information architectures. • Practical competences: Through the module the student will attain competence in: Employing design tools in the design of information architectures. Academic content and basis This course is similar to the other "IT technologies" courses in that they are very practically oriented, and enables academic engagement within the profession of Information Architecture, by allowing the students to familiarize themselves with tools in the profession. The module include not only IT tools but also some non-IT tools for the students role as designers. The professional and practical competences that will be covered are: **IT Design Tools** GIMP AXURE MIXED PROTOTYPING **DEVELOPMENT OF TAXONOMIES** Non- IT design tools

- Lego serious play (User Requirements with LEGO)
- Design thinking tool (4 questions, ten tools)
- Serious game (how to use for design in IA)
- The Strategy tree
- Force Field analysis
- Playscrips
- Effectiveness of visual modelling vs. traditional text or matrix

[Study board: we have been late in coordinating whether 3D-printing should be part of the course this semester - still to be solved]

# Scope and expectations

The expected scope of the module in terms of ECTS load. This comprises number of teaching hours, exercises, preparation time.

- 6 times of 3-4 hours with interactive discussions and hands-on trials

- Additional work, requiring 2-3 weeks of independent training in order to reach sufficient grasp of the tools

- The course finish with a 3-day assignment where all time needs to be spent on working with an assignment

## Module activities (course sessions etc.)

The three first lectures are based on non-IT tools for design. It combines hand on and theory.

## Lecture 1: Tools for IA practice part I Topics:

- 1. The Strategic tree
- 2. Force Field analysis
- 3. Playscrips

Date and time: Thursday September 25th, from 14:15 to 16:15, room 4.105, by Heilyn Camacho Literature: Jacobides, M. (2010). STRATEGY TOOLS FOR A SHIFTING LANDSCAPE. Harvard Business Review January–February2010

# Lecture 2: Tools for IA practice part II

Topics:

- 1. Experiencing Lego serious play User Requirements?
- 2. Facilitation role
- 3. How to move from LSP models to project description and project plan

Date and time: Friday September 26th, from 12:15 to 15:15, room 4.105, by Heilyn Camacho Literature:

- 1. Kristiansen, P. and Rasmussen, R (2014). Building a Better Business Using the Lego Serious Play Method. John Wiley & Sons, New Jersey, USA
- 2. Jacobs, C and Staltler, M. (2005) Strategy Creation as Serious Play in Floyd, S., Roos, J., Jacobs, C. And Kellermanns, F. (2005) Innovating Strategy Process. Blackwell Publishing, USA.

## Lecture 3: Tools for IA practice part III

Topics:

- Design thinking tool (4 questions, ten tools)
- Serious game (how to use for design in IA)
- Effectiveness of visual modelling vs. traditional text or matrix

This last lecture integrate theory, methodologies (from the Strategy for Change Mondule) and tools (from the IT Design Tools Module)

Lecture: Monday September 29th, from 12:15 to 15:15, room 4.105, by Heilyn Camacho Literature:

3. Ogilvie, Tim, and Liedtka, Jeanne. Designing for Growth : A Design Thinking Tool Kit for Managers. New York, NY, USA: Columbia University Press, 2011.

4. Jacobs, C and Staltler, M. (2005) Strategy Creation as Serious Play in Floyd, S., Roos, J., Jacobs, C. And Kellermanns, F. (2005) Innovating Strategy Process. Blackwell Publishing, USA.

The following lectures are based on IT, therefore it is software oriented lectures. The literature for these sessions will be Online material and reference manuals

### Lecture 4: Raster Graphics I

Improve your speed in handling raster graphics, with specific focus on prototyping.

#### Lecture 5: Raster Graphics II

More work with raster graphics.

#### Lecture 6: Wireframing in Axure

Note! You should have Axure installed for this session. But do not install too early, unless you have a non-trial version. The trial version is for 30 days, and you want to have it running during the exam.

#### Lecture 7: Mixed prototyping

For this session you need to bring sketching material; pens, papers, scissors. And if you have a camera with wifi, bring that as well.

### Date and time:

#### Examination

An internal written individual test in: IT Technology: Design Tools. The test takes the form of a set take-home assignment to be handed in after 3 days, in which the student completes a designated task on the design of an information architecture, using the guidelines set out in course teaching. The answer must contain sketches, illustrations and text, and must have an extent of at least 10 pages and not more than 15 pages.

The test is handed out through email, and is delivered back in Moodle, in zipped files.

Module title, ECTS credits		
Module 7 Persuasion (optional module)		
10 ECTS		
Location		
9. semester Information Architecture		
elective course		
Module coordinator		
Sandra Burri Gram-Hansen		
Type and language		

Study module	
English	

#### Objectives

The elective course in Persuasion aims to explore the fields of Persuasive Technologies and Persuasive Design. The notion of attitude and behaviour changing technologies is approached and discussed from a basis in classic humanistic traditions such as rhetoric, ethics and logic. Besides from a broad literary study of both classic and new approaches to persuasion, the course will place a particular focus on the potential of location and context aware technologies, as well as on motivating information architecture. During the course, students will engage in both theoretical discussions and practical case work.

Through the course the students will:

- Become knowledgeable about persuasion, persuasive design and the potential of attitude and behaviour changing technologies.
- Become able to analyse, discuss and apply persuasive design principles in theory and practice.

#### Academic content and basis

The objectives of this course module will be reached by a combination of literary studies and group discussions, and practical case work. The course is completed by a written exam, in which the students demonstrate their ability to apply persuasive/rhetorical principles when designing and commenting on the information architecture of a digital resource.

#### Scope and expectations

The ECTS load of this course is 10 ECTS points corresponding to a student workload of app. 275 working hours.

## Participants

Students enrolled at the 9th semester Information Architecture

## **Prerequisites for participation**

BA-level in studies accepted by the study board of Humanistisk Informatik

## Module activities (course sessions etc.)

Most of the activities will be held in room 4.105 at Rendsburggade 14.

The basic reading will be: Fogg (2003) Persuasive Technology: Using Computers to Change what We Think and Do, Morgan Kaufman Publishers. However, new scientific articles will be added in the literature.

## Lecture 1: On being Persuaded

This first lecture focuses on the notion of persuasion as approached by Miller and Fogg. The lecture introduces Fogg's approach to Persuasive Technology, and uses this as a framework for some of the themes which will be discussed in the following lectures

#### Literature:

- 1. Fogg, BJ, Side 1-20 (Preface + chapter 1)
- 2. Miller, G. On Being Persuaded (available in the files folder for this lecture)

# Lecture 2: Persuasive Design in rhetorical Perspective

This second lecture focuses on Persuasive Design in a rhetorical perspective. The notion of persuasion itself may easily be related to the field of classical and digital rhetoric, particularly when considering the rhetorical notion of Kairos

Literature:

- 1. Christensen, A-K. og Hasle, P., Classical rhetoric and a limit to Persuasion
- 2. Harker, M. (2007) The Ethics of Argument: Rereading Kairos and Making Sense in a Timely Fashion

## Lecture 3: Methodological approaches

This lecture will focus on some of the methodological approaches which dominate the field of Persuasive Technology and Persuasive Design. The aim is to address one of the areas of diversity which characterises the field.

Literature:

- 1. Fogg, BJ s. 23-54
- 2. Davis, Janet Generating Directions for Persuasive Technology Design with the Inspiration Card Workshop
- 3. Lockton, Dan Design with Intent- Persuasive Technology in a Wider Context
- 4. Oinas-Kukkonen et.al. Persauasive System Design Model

While reading the Lockton paper, it is recommended that you also visit the website <u>www.danlockton.com</u>

# Lecture 4: Ethics and Value Sensitive Design

The notion of intentionally changing peoples attitudes or behavior, calls for fundamental ethical reflections. This lecture draws the attention towards some of the ethical challenges related to Persuasive Design, as well as a general understanding of different ethical traditions and perspectives.

Literature:

- 1. Fogg 2003 s 147-177 og 211-235
- 2. Gram-Hansen, On the Role of Ethics in Persuasive Design Albrechtslund, A. Ethics in Technology Design
- 3. Powers, P. Persuasion and Coercion
- 4. Smids, J The Voluntariness of Persuasive Technology

# Lecture 5: Mobile Persuasion

This lecture focuses on the persuasive potential of mobile, context aware and location based technologies.

Literature:

1. Fogg, P. 183-210

# Lecture 6: Persuasive Technology - Best of

This lecture focuses on some of the perspectives on Persuasive Design which do not fit into a particular theme, but remain particularly relevant to address. This includes some of the practical research which has been conducted by Technical University Eindhoven

## Litterature:

- 1. Fogg p.61-115
- 2. Fogg, BJ Mass Interpersonal persuasion
- 3. Midden & Haam Ambient Persuasive Technology Needs little Cognitive Effort:
- 4. Björneborn Design Dimensions Enabling Divergent Behaviour across Physical, Digital, and Social Library Interfaces

## Lecture 7: Persuasive Design - Best Of Vol. 2

This lecture continues our work from last time, as we explore persuasive design perspectives which are particularly relevant to your upcoming exam.

## Literature:

- 1. Lehto, T. and Oinas-Kukkonen, H.: Persuasive Features in Six Weight Loss Websites: A Qualitative Evaluation
- 2. Lykke, M.: Persuasive design principles: means to improve the use of information organisation and search features in Web site information architecture?
- 3. Redström, J.: Persuasive Design: Fringes and Foundations

# The module includes a field trip.

# Examination

Den studerende på den generelle uddannelse vælger enten prøve 11 eller prøve 12, jf. § 6, stk. 3. Den studerende på PD-linjen vælger enten prøve 12 eller prøve 13, jf. § 6, stk. 7.

Ved afslutningen af 9. semester afholdes på den generelle uddannelse følgende prøve:

11. En intern skriftlig individuel prøve i: Persuasion (Persuasion). Den studerende udarbejder og kommenterer en retorisk/persuasiv udformning af et website med tilhørende refleksioner funderet i retorik efter eget valg. Opgavebesvarelsen skal være på mindst 15 og må højst være på 20 sider. Der gives en karakter efter 7-trinsskalaen.

Prøven skal i forhold til de i § 16 opstillede kompetencemål dokumentere, at den studerende kan:

- udforme en informationsarkitektur med bestemte persuasive intentioner
- begrunde udformningen retorisk.

Ved bedømmelsen af prøvepræstationen vil der med henblik på opnåelse af karakteren 12 blive

lagt vægt på, at den studerende indløser ovenstående krav på en fyldestgørende, selvstændig og overbevisende måde.

De studieelementer, der ligger til grund for prøven, har en vægt på 10 ECTS-point.