

Studyboard for Communication and Digital Media Fall 2015

Semester description

9th semester Information Architecture

Semester details

School: School of Communication, Art and Technology (CAT) Study board: Study Board for Communication and Digital Media

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 for 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 technological design tools, allowing the students to familiarize themselves with tools in the profession of information architecture
- 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.

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: Pia KnudsenT: (+45) 9940 7266 | Email: piak@hum.aau.dk

Module description

Module title, ECTS credits and STADS code

Module 7: Strategi for Forandring (Strategy for Change)
15 ECTS

Location

9Th semester

Study board: Study Board for Communication and Digital Media

Module coordinator

Heilyn Camacho.

Type and language

Module type: project module Language of instruction: 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:

 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 previous semester (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.

Scope and expectations

The module is organised with 27 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 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. For the semester project students receive 15 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 Communication and Digital Media

Module activities (course sessions etc.)

All the activities will be held at Rendsburggade 14. Room number will be announced in Moodle.

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

Lecturer: Heilyn Camacho

Date and time: September 3rd, 2015, from 9:00-12:00

Literature for the lecture:

- 1. Argyris, Chris. (1977). Double loop learning in organizations. Harvard Business Review, 55, 115...
- 2. Senge, P. (1990). Fifth discipline: The art and practice of the learning organization (Repr. ed.). London: Century Business. Chapter 5 and 10.

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. Public sector strategy. Stakeholder theory. Enterprise Architecture recap.

Lecturer: Pär-Ola Zander

Date and time: September 4th, 2015, from 10:00-14:00

Literature for the lecture:

- 1. Amit, R., & Zott, C. (2001). Value creation in E-business. Strategic Management Journal, 22, 493–520.
- 2. Alford, J. (2001). The implications of "publicness" for strategic management theory. Exploring public sector strategy (pp. 1–13).

Lecture 3: Alternatives to the discourse of the business schools. Presenting the Grounding Example: MOOCs in Higher Education

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

Lecturer: Pär-Ola Zander

Date and time: September 7th, 2015, from 12:30-15:30

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. Skim Lewis: Lewis, L. K. (2011). Organizational change: creating change through strategic communication. Chichester, West Sussex; Malden, MA: Wiley-Blackwell.
- 3. McKendall, M. (1993). The tyranny of Change Organizational development revisited. Journal of Business Ethics, 12(2), 93–104.

Lecture 4: Discussion of different models for change, including organizational culture as a strategy for change.

Lecturer: Heilyn Camacho

Date and time: September 10th, 2015, from 9:00-12:30

Literature for the lecture:

- 1. Burnes, Bernard (2004) Kurt Lewin and the Planned Approach to Change: A Re-appraisal. Journal of Management Studies 41:6 September 2004
- 2. 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)
- 3. Kotter, J. P. (1996). Leading change. Boston, Mass: Harvard Business School Press. From page 1-31.
- 4. Maria Vakola (2013) Multilevel Readiness to Organizational Change: A Conceptual Approach, Journal of Change Management, 13:1, 96-109
- 5. Schein, E. (2010). Organizational culture and leadership (Elektronisk udgave. -4th ed., The Jossey-Bass business & management series). San Francisco: Jossey-Bass. Chapter 1 and 2

Lecture 5: Design Strategy I

Moving from general concepts of strategy and change, and towards our context - design.

Lecturer: Pär-Ola Zander

Date and time: September 11th, 2015, from 10:00-13:30

Literature for the lecture:

- 1. 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.
- 2. 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 5: Design Strategy II

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

Date and time: September 14th, 2015, from 12:30-16:30

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

2. Choeda, Dupka, D., Penjor, T., & Zander, P.-O. (In review). Is World Culture always a Resource for Design of ICT? In review for the 4th International Conference on Human Computer Interaction & Learning Technology.

Lecture 7 and 8: Strategies for change-Methodologies

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

Lecturer: Heilyn Camacho

Dates and time:

1. September 17th and 18th, 2014 from 9:00-12:00

Literature for the lectures:

- 1. Hinthorne, Lauren Leigh, & Schneider, Katy. (2012). Playing with purpose: Using serious play to enhance participatory development communication in research. International Journal of Communication (Online), 2801.
- 2. Kristiansen, P. and Rasmussen, R (2014). Building a Better Business Using the Lego Serious Play Method. John Wiley & Sons, New Jersey, USA.
- 3. Brown, Tim. (2008) Design Thinking. Harvard Business Review, June 2008. (available in AUB)
- 4. Mootee, I. (2013). Design Thinking for Strategic Innovations: What They Can't Teach You at Business or Design School. Wiley. **You should read**: Scene 02: what is Design thinking, really? and Scene 03: Applied Design Thinking in Business and strategy only from page 62-73 (ten principles of DT) (online in AUB)
- 5. Stanford University (2010). Design Thinking process Mode Guide. D.school.
- 6. 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)
- 7. Revans, R. (1998). ABC of Action Learning (Review edited of 1983 edition ed.). London: Lemons & Crane.
- 8. Fenn, T. and Hobbs, J. (2014). The Information Architecture of Meaning Making. A. Resmini (ed) In Reframing Information Architecture. Human-Computer Interaction Series
- 9. Hinton, A. (2014). What We Make When We Make Information Architecture. A. Resmini (ed.), Reframing Information Architecture, Human-Computer Interaction Series. Springer International Publishing Switzerland.

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.

Module title, ECTS credits and STADS code

Modul 6 It-teknik: designværktøjer (IT Technology: Design Tools)

Danish and English title

5 ECTS

Location

9. semester, Information Architecture

Study board: Study Board for Communication and Digital Media

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. SEP_i



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 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 professional and practical competences that will be covered are:

IT Design Tools

- Raster Graphics
- AXURE
- MIXED PROTOTYPING
- Eve tracking
- Choosing between tools

Scope and expectations

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

- 7 times of 3 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

Participants

Students enrolled at the 9th semester Information Architecture

Prerequisites for participation

BA-level in studies accepted by the Study Board of Communication and Digital Media

Module activities (course sessions etc.)

Lecture 1: Raster Graphics I

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

Lecture 2: Raster Graphics II

More work with raster graphics.

Lecture 3: 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 4: Wireframing in Axure II

More work in Axure.

Lecture 5: Google Analytics

You need a Google account and a Google Analytics account for this session.

[Check with Heilyn for 2nd opinion]

Lecture 6: Mixed prototyping

Follow-up on Google Analytics

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:

Lecture 7: Eye-tracking

Topics: How to set up an eye-tracking test.

Literature

- 1. Webb, N., & Renshaw, T. (2008). Eyetracking in HCI. In P. Cains & A. L. Cox (Eds.), Research methods for human-computer interaction (pp. 35-69). Cambridge, UK: Cambridge University Press.
- 2. Lim, Y.-K., Stolterman, E., & Tenenberg, J. (2008). The anatomy of prototypes. *ACM Transactions on Computer-Human Interaction*, *15*(2), 1–27. http://doi.org/10.1145/1375761.1375762
- 3. Ehn, P., & Kyng, M. (1986). A tool perspective on design of interactive computer support for skilled workers. *DAIMI Report Series*, *14*(190).
- 4. Dow, S. P., Heddleston, K., & Klemmer, S. R. (2009). The efficacy of prototyping under time constraints. In *Proceedings of the seventh ACM conference on Creativity and cognition* (pp. 165–174). ACM.
- 5. Kanstrup, A. M., & Christiansen, E. (2005). Model power: still an issue? In *Proceedings of the 4th decennial conference on Critical computing: between sense and sensibility* (pp. 165–168). ACM.

- 6. Dade-Robertson, M. (n.d.). Between city lights receding and the non-space of the mind. In *The Architecture of Information: Architecture, Interaction Design and the Patterning of Digital Information* (pp. 67–89). Oxon: Routledge.
- 7. Hayles, K. (1999). How we became posthuman. Chicago: Chicago University Press.

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 and STADS code

Module 7 Persuasion (valgfrit modul)

10 ECTS

Location

9. semester Information Architecture elective course

Module coordinator

Sandra Burri Gram-Hansen

Type and language

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 the students will engage in discussions based on both theoretical perspectives and practical exemplifications.

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.

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 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 are 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:

- Fogg (2003) Persuasive Technology: Using Computers to Change what We Think and Do, Morgan Kaufman Publishers. (from page 1-20 Preface + chapter 1)
- Miller, G. On Being Persuaded (available in the files folder for this lecture)

Lecture 2: Persuasive Design, Perspectives and directions of a research field

This second lecture focuses on Persuasive Design as a field in development. Attention is directed towards the directions the field has taken over the last decade, and the different perspectives on persuasive design, which dominate the field today. Nudging is included as a new approach to behavior design that shares the social psychological foundation of persuasive design, but also distinguishes itself by its potential and limitations.

Literature:

- Torning, K. a. Oinas-Kukkonen, H.. (2009). Persuasive system design: state of the art and future directions. <u>Proceedings of the 4th International Conference on Persuasive Technology</u>. Claremont, Californien, ACM.
- Gram-Hansen, S. B. (2013). Persuasive Design A Matter of Context Adaptation.

- IWEPLET 2013 Workshop on Persuasive Technology in Learning and Teaching, Paphos, Cyprus.
- Stibe, Agnis (2015) Advancing Typology of Computer-Supported Influence: Moderation Effects in Socially Influencing Systems. Persuasive 2015, Springer

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:

- Fogg (2003) Persuasive Technology: Using Computers to Change what We Think and Do, Morgan Kaufman Publishers. (from page 23-54)
- Davis, J. (2010). Generating Directions for Persuasive Technology Design with the Inspiration Card Workshop. <u>Persuasive Technology</u> Springer Berlin / Heidelberg. **6137**: 262-273.
- Lockton, D., et al. (2008). <u>Persuasive Technology in a Wider Context Persuasive 2008</u>, Oulu Finland, Springer Berlin / Heidelberg.
- Oinas-Kukkonen, H. a. M. H. (2008). <u>A systematic Framework for Designing and Evaluating Persuasive Systems</u>. Persuasive 2008, Finland, Springer.

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

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:

- Fogg, B. (2003). <u>Persuasive Technology, Using Computers to change what we Think and Do</u>, Morgan Kaufmann Publishers.s 147-177 og 211-235
- Gram-Hansen, S. B. a. L. B. G.-H. (2013). On the role of ethics in Persuasive Design. <u>Ethicomp 2013</u>. Kolding, Syddansk Universitetsforlag
- Albrechtslund, A. (2007). "Ethics and Technology Design." <u>Ethics and Information Technology</u> 9(1): 63-72.
- Powers, P. (2007) Persuasion and Coercion: A Critical Review of Philosophical and Empirical approaches, HEC Forum, Vol 19 pp 125-143
- Smids, J (2012) The Voluntariness of Persuasive Technology, 7th international conference

- on Persuasive Technology, pp 123-132 Springer
- Harker, M. (2007) The Ethics of Argument: Rereading Kairos and Making Sense in a Timely Fashion, College Composition and Communication, vol 59, No 1, pp 77-97

Lecture 5: Persuasive Robots – Persuasive Design in Practice

This lecture features two guest speakers, each with a background in Persuasive Design, and each doing research in persuasive robotics. The lecture will provide practical examples of research involving persuasive design, and place a particular focus on methodological approaches, empirical data collection and evaluation.

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:

- Fogg, B. (2003). <u>Persuasive Technology, Using Computers to change what we Think and Do</u>, Morgan Kaufmann Publishers p.61-115
- Fogg, BJ (2007) Mass Interpersonal persuasion An Early View of a New Phenomenon, Third International Conference on Persuasive Technology, Oulu, Springer
- Ham, J. a. C. M. (2010). Ambient Persuasive Technology Needs Little Cognitive Effort: The Differential Effects of Cognitive Load on Lighting Feedback versus Factual Feedback Persuasive 2010, Copenhagen, Springer Verlag.
- Björneborn, L. (2010) Design Dimensions Enabling Divergent Behaviour across Physical, Digital, and Social Library Interfaces, 5th International Conference on Persuasive Technology, Springer Verlag

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:

- Lu, Shengnan, Haam, J. a. Midden, C. (2015) Persuasive Technology Based on Bodily Comfort Experiences: The Effect of Color Temperature of Room Lighting on User Motivation to Change Room Temperature. Persuasive 2015. Springer
- Lykke, M. (2009). Persuasive design strategies: means to improve the use of information organisation and search features in web site information architechture? ASIST Special Interest Group on Classification Research 20th Workshop. Vancouver.
- Redström, J. (2006). Persuasive Design: Fringes and Foundations. Persuasive Technology 2006. Eindhoven, Springer.

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.