



AALBORG UNIVERSITY
DENMARK

Study Board of
Communication and Digital Media
Fall 2017

Semester description: 9th semester Information Architecture, Aalborg

About the semester

School: School of Music, music Therapy, Psychology, Communication, Art and Technology (MPACT)

Study Board: Communication and Digital Media

Study regulation: Regulations and curriculum for the Master's Programme in Information Architecture

http://www.fak.hum.aau.dk/digitalAssets/153/153850_ma_informationsarchitecture_2016_hum_aau.dk.pdf

Semester framework theme

The theme of this module is the practical reality of information architects. The module is organised around three real cases from private or public organisations. In this understanding, students will be introduced to the cases by the different case owners. After working in a case for three weeks, students will present a proposal to the case owner. As an alternative to these three real cases, students may choose an internship with a company, where students work together or individually to solve real life cases. Either way, students will have the opportunity to develop practical and theoretical knowledge to help them understand concrete work realities.

Semester organisation and time schedule

The semester is composed of three courses

1. **Information Architecture in Practice** (20 ECTS project module). The module focuses on training student competence in designing user-driven content and structure, , irrespective of media, and combining different cultural codes and media modalities. Students will work on three different cases. Each case runs for four weeks as described in Moodle. The module begins September 1st and the project report is due December 21st.
2. **Research Methodology** (5 ECTS study subject module). The primary goal of this course is to prepare students to plan and conduct large information architecture research projects as part of their master's thesis. The details of the module are in Moodle: <https://www.moodle.aau.dk/course/view.php?id=22340#section-6> . This course runs from week 40 through 48.
3. **Elective Course** (5 ECTS credit elective module). Students may choose electives offered by the study board. All elective courses start in week 41.

The semester is organised so students can build new knowledge on the knowledge and experience they gained from the last two semesters. The semester is based on active learning meaning that students are expected to engage actively in all the activities.

Semester coordinator and secretariat assistance

Module coordinator: Heilyn Camacho: hcamacho@hum.aau.dk

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

INFORMATION ARCHITECTURE IN PRACTICE (KDM_KA_INFORMATIONSARKITEKTUR_AAL)

Information Architecture in Practice 

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Module Description

The module focuses on training student competence in user-driven design, including content and structure in multiple information systems. Students will complete three design sequences, each lasting three weeks followed by one reflection week. A report is required for each reflection period. The design sequences are initiated by assignments presented by external partners along with the results of the student's work. The partner's feedback supplements academic supervision. In each design sequence, the student must utilize the theoretical knowledge addressed in the two previous semesters (7th and 8th). Students may choose to experience practical cases through an internship with another organisation.

Module title and ECTS

Information Architecture in Practice - 20 ECTS

Location

9th Semester of Information Architecture master programme

Module coordinator

Heilyn Camacho hcamacho@hum.aau.dk

Type and language

Project module - English

Objectives

In this module students will acquire:

Knowledge of:

- theory and methods of Information Architecture in practice with particular emphasis on the interface of theory and methods on the one hand and the cultural, organisational and/or technological complexity of the application area on the other hand
- the actual work situation towards which the programme is directed
- communication and collaboration practices within the field of informatics
- competence requirements of the discipline in work contexts.

Skills in:

- working in practice on the basis of informatics, including applying strategies and methods for user analysis, pilot studies, system development and system design
- assessing issues and solutions within the field of informatics in practice, on the basis of theories and methods for user analysis, pilot studies, system development or system design
- communicating knowledge within informatics to peers and laypeople
- managing themselves in work contexts with a view to identifying issues pertaining to skills and competences.

Competences in:

- taking an analytical, reflective and critical approach to the preconditions for user analysis, pilot studies, system development or system design in practice
- taking an analytical, reflective and critical approach to user analysis, pilot studies, system development or system design in practice

- engaging in disciplinary and interdisciplinary collaboration on user analysis, pilot studies, system development or system design in practice, with a professional approach
- identifying own learning needs and structuring own learning in relation to the subject area of user analysis, pilot studies, system development or system design in practice

Content

The module has as its overall objective to form students to become capable of dealing with real information architecture situations within an organizational context. Therefore, the general topics that will be covered are:

1. The identity of an information architect
2. Reflective practitioner
3. Design of information environments
4. Evaluation of information environments
5. Communicating design solutions within academic and business contexts

Scope and expectations

The scope of this semester project module is 20 ECTS – this includes practice oriented work placement and the production of a project report. The course demands 550 hours including the examination.

The literature has been divided into three types: literature to support the reflection and learning process of the students, literature that apply for all the three cases and specific literature for each case. Finally, because of the nature of this model, there are several links to practical tools and blogs of IA experts. The details of the literature will be found below

Requirements

Have approved 7th and 8th semester of Information Architecture master programme or another relevant master programme.

Participants

Students from the 9th semester of Information Architecture master programme.

Examination

An internal oral examination in: "Information Architecture in Practice"

In the examination the students present their proposals for designs, taking a point of departure in the three reflection reports prepared in the module. The examination is a conversation between the student(s) and the examiner and internal examiner based on a project report produced individually or in a group. To attend a group exam, all three cases must be solved as a group. All three cases must be covered in the project report.

The project report/written work will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the entire project report, and one combined grade will be awarded each student for the project report and the oral performance.

The project report: the total number of pages must be no less than 15 pages and no more than 20 pages per student in a project group, and 30 pages if written individually.

Literature: 2000 standard pages supervisor approved, self-selected literature related to the project. But Because the modality of the course the literature foundation is of 1200 standard pages.

Evaluation: Grading according to the 7-point scale.

At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.

The project report and the conversation must demonstrate that the student fulfills the objectives for the module stated above.

In the evaluation of the examination performance, the grade 12 will only be awarded to students who give an excellent performance and demonstrate that they have fulfilled the above objectives exhaustively or with only few

Module activities

The module is structured around three main activities: case work, lectures and action learning sessions (the students will be introduced to the action learning approach).

The cases

The module is organised around three cases; each case is focused on a specific aspect of information architecture practice.

Case one: App evaluation. The first case focuses on an evaluation. Students will evaluate the first draft of an App called MOVE, which is the product of a participatory design research project.

Case two: Web information architecture. The second case focuses on designing a knowledge sharing portal. Students must link their design proposal with their organisation's goals and systems to achieve information technology alignment.

Case three: Research information architecture practices in local Small Medium sized enterprises. The last case focuses on evaluating ten websites of small to medium-sized companies in Aalborg, to identify common problems and propose general guidelines regarding information architecture for that sector.

The action learning sessions

This module requires students to reflect on the cases they developed and on general information architecture practice. Action learning facilitates both reflection on action and reflection in action. An action learning session will be held when the students are working on each case (reflection in action) as well as one at the end of each case (reflection on action). In total, six action learning sessions will be held during the module. Each session will last for two hours. Those sessions will demand a higher level of critical thinking. Students should reflect critically on theory, practice and design problems. They will also address the causes of those problems and how to face those challenges in the future.

The lectures

Students will have four lectures:

The **first lecture** discusses reflective practitioners, establishing the theoretical base for the semester and introducing the kind of reflection expected of students as they work on each case. The **second lecture** (for case 1) is a combination of lecture and workshop. Students will be introduced to different examples of technology evaluation within the health sector, as well as analyse each example to determine the advantages and disadvantages of each example. Furthermore, they should use the theories from their 7th semester. In the **third lecture** (for case 2), students will analyse different methods for designing knowledge sharing systems. This lecture focuses on system requirements. Furthermore, students should be able to choose appropriate design processes, methods and strategies for their case. The **last lecture** (for case 3) introduces students to methods for studying professional practices. After this lecture, students should be able to create a sound research design to determine a company's information architecture practices.

Activities:

1. Semester introduction by Heilyn Camacho (1 hour)
2. Workshop: constructing the information architect identity: theory, methods, and tools. By Heilyn Camacho (3 hours)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Revans, R. (1998). <i>ABC of Action Learning (Review edited of 1983 edition ed.)</i> . London: Lemons & Crane.	155		
Schön, D. (1983). <i>The Reflective Practitioner : How professionals think in action</i> (New ed.). Aldershot: Arena. Chapter 2: From Technical Rationality to Reflection in Action	48		
Schön, D. (1983). <i>The Reflective Practitioner : How professionals think in action</i> (New ed.). Aldershot: Arena. Chapter 5 The Structure of Reflection-in-Action.	39		
Hamby, B. (2013). "Willingness to inquire: the cardinal critical thinking virtue". Paper 67. Ontario Society for the Study of Argumentation Conference. May 22 nd – 25 th). University of Windsor.	13		
Rosenfeld, L., & Morville, Peter ; Arango, Jorge ; Morville, Peter. (2015). <i>Information architecture for the World Wide Web</i> (Fourth edition / Louis Rosenfeld, Peter Morville, Jorge Arango.. ed.).		400	
Preece, J., Sharp, Helen, & Rogers, Yvonne. (2015). <i>Interaction design: Beyond human-computer interaction</i> (4.th ed.). Hoboken NJ: John Wiley & Sons.		800	
Cross, N. (2011). <i>Design Thinking – Understanding how designers think and work</i> . Bloomsbury Academic.	192		
Maguire, M. (2001). Methods to support human-centred design. <i>International journal of human-computer studies</i> , 55(4), 587-634.	48		
Total	495	1200	

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Case 1: Apps Evaluation

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As mention above each case is developed in four weeks. The case is presented by an external partner, the students work on the case for 3 weeks and present a solution to the case owner. In each case there is two action learning meetings and one week to write a report using a reflective approach.

Activities:

1. Case presentation by Anne Marie Kanstrup (30 minutes)
2. Lecture on Apps evaluation by Tanja Jonasen (4 hours)
3. Action learning sessions lead by Heilyn Camacho (2 hours each one)
4. Students' proposal presentation (45 minutes)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Itzpatrick, G., & Ellingsen, G. (2012). A Review of 25 Years of CSCW Research in Healthcare: Contributions, Challenges and Future Agendas. <i>Computer Supported Cooperative Work (CSCW)</i> , 22(4–6), 609–665.	54		
Mirkovic, J., Kaufman, D. R., & Ruland, C. M. (2014). Supporting Cancer Patients in Illness Management: Usability Evaluation of a Mobile App. <i>JMIR mHealth and uHealth</i> , 2(3), e33.	33		
Wac, K., Ickin, S., Hong, J.-H., Janowski, L., Fiedler, M., & Dey, A. K. (2011). Studying the Experience of Mobile Applications Used in Different Contexts of Daily Life. In <i>Proceedings of the First ACM SIGCOMM Workshop on Measurements Up the Stack</i> (pp. 7–12). New York: ACM	5		
Patrick Lo Allan Cho Man-hon Leung Dickson K.W. Chiu Eddie H.T. Ko Kevin K.W. Ho. (2016). "Use of smartphones by art and design students for accessing library services and learning", <i>Library Hi Tech</i> , Vol. 34 Issue 2 pp. 224 - 238	17		
Falaki, H. et al. (2010). Diversity in smartphone usage. <i>Proceedings of the 8th international conference on Mobile systems, applications, and services (Mobisys '10)</i> . New York: ACM. Pp. 179-194.	15		
Hoober, S. & Berkman, E. ((2011). <i>Designing Mobile Interfaces</i> . Sebastopol: O' Reilly. Ch. 1-2	96		
Nielsen, J. & Budiu, R. (2013). <i>Mobile Usability</i> . Berkeley: New Riders. Ch. 2-5		168	
Tossell, C. et al. (2012). Characterizing web use on smartphones. <i>Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)</i> . New York: ACM. Pp. 2769-2778.		10	
Lalmas, M., O'Brien, H and Yom-Tov, E. (2014). Measuring user Engagement. <i>Synthesis Lectures on Information Concepts, Retrieval, and Services</i> , 2009. pp 81-102.	27		
Total	247	178	

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Case 2: systems requirements

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This case focuses on the task of collecting requirements to design a knowledge management system for internship activities.

Activities:

1. Case presentation by Heilyn Camacho (30 minutes)
2. Lecture Information systems development and design process by Heilyn Camacho and Marianne Lykke (3 hours)

3. Action learning sessions lead by Helyn Camacho (2 hours each one)

4. Students' proposal presentation (45 minutes)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Hinton, Andrew (2014). What we Make when we make information architecture. Page 103-117. In Resmini, A., & SpringerLink. (2014). <i>Reframing Information Architecture</i> . Human-Computer Interaction Series. Cham: Springer International Publishing.		15	
Elizabeth B.-N. Sanders & Pieter Jan Stappers (2014) Probes, toolkits and prototypes: three approaches to making in codesigning, <i>CoDesign</i> , 10:1, 5-14.	11		
Yanki Lee (2008) Design participation tactics: the challenges and new roles for designers in the co-design process, <i>CoDesign</i> , 4:1, 31-50,	21		
Lykke, M. (2009). Persuasive design strategies: means to improve the use of information organisation and search features in web site information architecture? ASIST Special Interest Group on Classification Research 20th Workshop. Vancouver.	10		
Zoltowski, C., Oakes, W., & Cardella, M. (2012). Students' Ways of Experiencing Human-Centered Design. <i>Journal of Engineering Education</i> , 101(1), 28-59.		31	
Steen, M. (2011). Tensions in human-centred design. <i>CoDesign</i> , 7(1), 45-60.	15		
Pruitt, J., & Adlin, T. (2006). Phase 2: Conception & gestation (Creating personas). In Pruitt, J., & Adlin, T. (Eds.), <i>The persona lifecycle : Keeping people in mind throughout product design</i> (pp. 162-272). Amsterdam: Elsevier.	100		
Bonnemaire, G., & Liem, A. (2011). The semantic debate in design theories applied to product identity creation. In <i>DS 68- 2: Proceedings of the 18th International Conference on Engineering Design (ICED 11), Impacting Society through Engineering Design, Vol. 2: Design Theory and Research Methodology</i> , Lyngby/Copenhagen, Denmark, 15.-19.08. 2011.	12		
Liem, A., & Sanders, E. B. N. (2013). Human-centred design workshops in collaborative strategic design projects: An educational and professional comparison. <i>Design and Technology Education: an International Journal</i> , 18(1).	18		
Bratteteig, T., Bødker, K., Dittrich, Y., Mogensen, P. H., & Simonsen, J. (2012). Methods. Organising principles and general guidelines for Participatory Design projects. In J. Simonsen, & T. Robertson (Eds.), <i>Routledge Handbook of Participatory Design</i> (pp. 117-144). Routledge.	27		

Ding, W. & Lin, X. (2010). <i>Information Architecture: The Design and Integration of Information spaces</i> . San Rafael, Calif.: Morgan & Claypool Publishers. U.S. Ch 4 and 9			
Ding, W. & Lin, X. (2009). <i>Information Architecture: The Design and Integration of Information Spaces</i> . Synthesis Lectures on Information Concepts, Retrieval, and Services. Gary Marchionini (Ed).	21		
Maican, C. and Lixandroi, R (2016). A system architecture based on open source enterprise content management systems for supporting education institutions. <i>International Journal of Information Management</i> , 36, page 207-2014.	8		
Brancheau, J. C. (1986). <i>Information Architectures: Methods and Practice</i> . <i>Information processing & management</i> , 22(6), 453-63	10		
Evernden, R., & Evernden, E. (2003). <i>Information first: Integrating knowledge and information architecture for business advantage</i> . London: Butterworth-Heinemann. Chapter 2,3 and	78		
Markus, M. L., A. Majchrzak and L. Gasser (2002). "A design theory for systems that support emergent knowledge processes." 26(3): 179-212	35		
Total	365	96	

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Case 3: practice of information architecture

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This is a research practice case. The students will investigate the practice of information architecture in local small companies.

There is less literature because there are more empirical work and the reuse of the literature of the previous two cases.

Activities:

1. Case presentation by Heilyn Camacho (30 minutes)
2. Lecture on investigating professional practices by Heilyn Camacho (3 hours)
3. Action learning sessions lead by Heilyn Camacho (2 hours each one)
4. Students' proposal presentation (45 minutes)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Burford, S., Given, L. and Hider, P. (2015). <i>Fragmented Practice: Creating and Maintaining Information – Rich Websites in SMEs</i> . <i>Libres</i> , Vol. 25, Issue 1.	15		
Cataldo, A., McQueen, R. and Hardings J (2012) <i>Comparing Strategic IT Alignment versus Process IT Alignment in SMEs</i> . <i>Journal of Research and Practice in Information Technology</i> , Vol. 44		15	

Pogas-Rascão, J. (2015). Information Architecture in Jamil, G. L., & Jamil, G. L. (Editors). Handbook of Research on Information Architecture and Management in Modern Organizations. (2015). Information Science Reference	25		
Bernaert, M., Poels, G.; Snoeck, M. and De Backer, M. (2014) Enterprise Architecture for Small and Medium-Sized Enterprises: a Starting Point for Bringing EA to SMEs, Based on Adoptions Models. In J. Devos et al. (eds.), Information Systems for Small and Medium-sized Enterprises, Process in IS. Springer.	30		
Burford, Sally (2014). The interplay of the Information Disciplines and Information Architecture. Page 46-59. In Resmini, A., & SpringerLink. (2014). Reframing Information Architecture. Human-Computer Interaction Series. Cham: Springer International Publishing.	17		
Burford, S. & Given, L. M. (2013). The Practitioners of Web Information Architecture in Small and Medium Enterprises. Journal of Information Architecture. Vol. 5, No. 1-2. Page 25-44.	19		
Cook, S., & Brown, J. S. (1999). Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing. Organization Science, 10(4), 381-400	19		
Eisenhardt, K., & Graebner, M. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), 25-32.	8		
Geiger, D. (2009). Revisiting the concept of practice: Toward an argumentative understanding of practicing. Management Learning, 40(2), 129-144	15		
Total	148	15	

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Practical material

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Those are links that may help you in your practical work:

Prototype tools:

- <http://usabilitygeek.com/6-prototyping-tools-ux-designer/>

Design, user analysis and usability tools:

- <http://www.servicedesigntools.org/>
- <http://tools.subtraction.com/>
- <http://www.creativebloq.com/web-design/10-web-design-tools-you-cant-live-without-51514957>

Usability blog:

- <http://usabilitygeek.com/>

Trends

- <http://s18512.p253.sites.pressdns.com/>

Relevant blogs from Information architecture experts

- Andrew Hinton: <http://andrewhinton.com/>
- Peter Morville <http://semanticstudios.com/about/>


Intranet Information Architecture

- <https://www.nngroup.com/articles/intranet-information-architecture-ia/> (special attention to the Intranet Information Architecture Design Methods and Case Studies report)
- <https://axerosolutions.com/blogs/timeisenhauer/pulse/290/the-why-s-and-how-s-of-intranet-information-architecture>
- <https://www.nngroup.com/articles/intranet-design/>

Organizations developing the IA practice:

IA Institute: <http://www.iainstitute.org/>

DSIA portal: http://www.methodbrain.com/dsia_portal.cfm

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