



AALBORG UNIVERSITY
DENMARK

Study Board of
Communication and Digital Media
Fall 2017

Semester description 7th semester Information Architecture, Aalborg

Semester details

School: School of Music, Music Therapy, Psychology, Art, Communication and Technology (MPACT)
Study Board: Storyboard for Communication and Digital Media
Study Regulation: Regulations and curriculum for the master's programme in information architecture, september 2017:
http://www.fak.hum.aau.dk/digitalAssets/287/287893_ma_informationsarchitecture_2017_hum_aau.dk.pdf

Semester framework theme

This project module focuses on design of information architecture (IA) for communication and human-computer interaction at web sites, social network, portals, online communities, intranets, e-learning systems. User-centred design that takes into account the users as well as technology. The students will build on communication theory from the bachelor education regarding genres, metaphors and patterns, and will learn to observe, analyse and interpret Information Architecture across media and organizational boundaries, and to understand why and how categorizing and knowledge organization has formatting impact on information handling and knowledge sharing.

Semester organisation and time schedule

This semester consists of two overall courses; Information Architecture, Rhetoric and Persuasive Design (15 ECTS), and Web Technology and Databases (10 ECTS). IA rhetoric presents core elements in the design of information architecture. Web Technology and Databases represents the technological angle on IA. The remainder 5 ECTS are allocated for elective courses.

Semester coordinator and secretariat assistance

Semester coordinator: Tanja Svarre.

Course coordinator: Tanja Svarre (Information architecture, rhetorics and persuasive design), Pär-Ola Zander (Web technology and databases).

Secretariat assistance provider: Pia Knudsen piak@hum.aau.dk

Administration

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Switch role to...

Search forums

Go

Advanced search

Latest announcements

Add a new topic...

(No news has been posted yet)

Upcoming events

There are no upcoming events

Go to calendar...

New event...

Recent activity

Activity since Wednesday, 16 August 2017, 10:09 PM

Full report of recent activity...

No recent activity

Dashboard > School of Music, Music Therapy, Psychology, Art, Communication & Technology (IMPACT) > Autumn 2017 > Study Board of Communication and Digital Media - Aalborg > 7th semester > Information Architecture > Information Architecture, Rhetoric, and Persuasive Design (KDM_KA_Informationsarkitektur_AAL) [E17-22346]

Turn editing on

Information architecture, rhetoric and persuasive design (project module)

Lecturers: Sandra Burri Gram-Hansen, Ann Bygholm, Marianne Lykke and Tanja Svarre

Course description:

The module will introduce the students to key elements of Information Architecture, including experiential, rhetorical and persuasive design principles. During the course module, the students will engage in lectures and discussions on information architecture, knowledge organisation, rhetoric, persuasive and experience design.

Objectives

In the module the students will acquire knowledge of:

- Information Architecture
- Rhetoric
- Persuasive design
- Experience design
- Knowledge organisation
- Knowledge of how information architectures participate in an interplay with usability, experiences and learning.

Skills in:

- observing, analysing and interpreting information architectures irrespective of medial and organisational boundaries,
- evaluating the use of rhetoric in ICT systems
- analysing the conceptual control and consistency in information architectures, their communicative effects and potential for further development

Competences in:

- taking an analytical, reflective and critical approach to the use of information architecture, rhetoric, persuasive and experience design
- engaging in an interdisciplinary collaboration on information architectures, rhetoric, persuasive and experience design in a specific context
- identifying own learning needs and structuring own learning in relation to the use of information architecture, rhetoric, persuasive and experience design in a specific context.

Semester introduction and first lecture

Lecturer: Tanja

Content: Firstly, the lecture introduces the semester. Next the concept of information architecture will be introduced along with the four components of information architecture. After the lecture we will take a tour around the Create building to locate the most important spots of your student life for the next two years.

Literature:

	Required reading	Supplementary reading	Digital upload
Ding, Lin & Zarro (2017). Information Architecture : The Design and Integration of Information Spaces, Morgan & Claypool Publishers. Ch. 1-2. Available here .	24 p.		
Rosenfeld, L., Morville, P. & Arango, J. (2015). <i>Information Architecture for the Web and Beyond</i> . Sebastopol: O'Reilly. Ch. 5. Available here .	20 p.		
Rosenfeld, L., Morville, P. & Arango, J. (2015). <i>Information Architecture for the Web and Beyond</i> . Sebastopol: O'Reilly. Ch. 1-3. Available here .		50 p.	

User practice and interaction

Lecturer: Tanja

Content: Understanding users information practice is a prerequisite for designing good information architecture. The lecture introduces the notion of information seeking to provide a framework for understanding users interaction with information. Core models and theories of seeking practice will be used as the point of departure. Also we will discuss the concept of interaction.

Literature:

	Required reading	Supplementary reading	Digital upload
Dourish, P. (2003). The appropriation of interactive technologies: Some lessons from placeless documents. <i>Computer Supported Cooperative Work</i> , 12(4), 465-490. Available here .	25 p.		
Wilson, T.D. (1999). Models in information behavior research. <i>Journal of documentation</i> , 55(3), 249-270. Available here .	21 p.		
Russel-Rose, T. & Tate, T. (2013). <i>Designing the Search Experience: The Information Architecture of Discovery</i> . Waltham: Morgan Kaufmann. Ch. 1-3. Available here .	70 p.		
Kuhlthau, C. (1991). Inside the search process: Information seeking from the user's perspective. <i>Journal of the American Society for Information Science</i> , 42(5), 361-371. Available here .		11 p.	
Kim, K. (2001). Information-seeking on the web: Effects of user and task variables. <i>Library & Information Science Research</i> , 23(3), 233-255. Available here .		22 p.	

Mobile and cross-channel IA

Lecturer: Tanja

Content: The lecture concerns the specific characteristics of mobile communication platforms and cross-channel communication. The topic is addressed from a user perspective as regards user practice on mobile platforms, and from a design perspective as regards the specific considerations to make in designing for mobile platforms and cross-channel search experience.

Literature:

	Required reading	Supplementary reading	Digital upload
Benyon, D. (2012). Presence in blended spaces. <i>Interacting with Computers</i> , 24(4), 219-226. Available here .	8 p.		
Fischer, J., Norris, S. & Buie, E. (2012). Sense-making in cross-channel design. <i>Journal of Information Architecture</i> , 4(1-2). Available here .	24 p.		
Russel-Rose, T. & Tate, T. (2013). <i>Designing the Search Experience: The Information Architecture of Discovery</i> . Waltham: Morgan Kaufmann. Ch. 10. Available here .		15 p.	
Nielsen, J. & Budiu, R. (2013). <i>Mobile Usability</i> . Berkeley: New Riders. Available here . Ch. 2-5		X	
Yu, N. & Kong, J. (2016). User experience with web browsing on small screens: Experimental investigations of mobile-page interface design and homepage design for news websites. <i>Information Sciences</i> , 330, 427-443. Available here .	17 p.		

Organization systems

Lecturer: Marianne

7/9. 12.30 - 14.15

Content: The lecture will introduce to the field of knowledge organization (KO) – how to represent, describe and organize knowledge in digital systems. The lecture will focus on the role and principles for knowledge organization and on tools.

Literature:

Rosenfeld, L., Morville, P. & Arango, J. (2015). Information Architecture. For the Web and Beyond. Sebastopol (CA): O'Reilly. 53 - 75, 97 - 131. (Chapter 4 and 6). Available [here](#).

Jacob, E. (2004). Classification and Categorization: A Difference that Makes a Difference. *Library Trends* 52(3). 515-540.

	Required reading	Supplementary reading	Digital upload
Rosenfeld, L., Morville, P. & Arango, J. (2015). Information Architecture. For the Web and Beyond. Sebastopol (CA): O'Reilly. 53 - 75, 97 - 131. (Chapter 4 and 6).	66 p.		x
Jacob, E. (2004). Classification and Categorization: A Difference that Makes a Difference. <i>Library Trends</i> 52(3). 515-540.	25 p.		x

Labelling systems

Lecturer: Marianne

Content:

7/9. 14.30 - 16.15

Content: The lecture will introduce to the labelling, the choice of vocabulary and terms to represent content and communicate with users. The lecture will focus on the users' language use and the derived "vocabulary problem" in Information Architecture.

Literature:

Rosenfeld, L., Morville, P. & Arango, J. (2015). Information Architecture. For the Web and Beyond. Sebastopol (CA): O'Reilly. 53 - 75, 97 - 131. (Chapter 4 and 6). Available [here](#).

Lykke Nielsen, M. (2005). Special libraries and specialized vocabularies in the digital age. In: Drake, M. A. (ed). New York: Marcel Dekker. *Encyclopedia in Library and Information Science*. 7. p.

	Required reading	Supplementary reading	Digital upload
Rosenfeld, L., Morville, P. & Arango, J. (2015). Information Architecture. For the Web and Beyond. Sebastopol (CA): O'Reilly. 133 - 173 (Chapter 5).	40 p.		x
Lykke Nielsen, M. (2005). Special libraries and specialized vocabularies in the digital age. In: Drake, M. A. (ed). New York: Marcel Dekker. <i>Encyclopedia in Library and Information Science</i> . 7. p.	7 p.		x

Navigation systems

Lecturer: Tanja

Content: Navigation systems support users' browsing on websites. The lecture will present the concept of navigation from a user and a design perspective.

Literature:

Perez-Montoro & Codina (2017). *Navigation design and SEO for content-intensive websites*. Amsterdam: Chandos/Elsevier. Ch. 2.

Rosenfeld, L., Morville, P. & Arango, J. (2015). *Information Architecture for the Web and Beyond*. Sebastopol: O'Reilly. Ch. 8. Available [here](#).

Kalbach, J. (2007). *Designing web navigation*. Sebastopol: O'Reilly. Available [here](#). Pp. 2-118.

	Required reading	Supplementary reading	Digital upload
Perez-Montoro & Codina (2017). <i>Navigation design and SEO for content-intensive websites</i> . Amsterdam: Chandos/Elsevier. Ch. 2.	54 p.		
Rosenfeld, L., Morville, P. & Arango, J. (2015). <i>Information Architecture for the Web and Beyond</i> . Sebastopol: O'Reilly. Ch. 8. Available here .	35 p.		
Kalbach, J. (2007). <i>Designing web navigation</i> . Sebastopol: O'Reilly. Available here . Pp. 2-118.		116 p.	

Search systems

Lecturer: Tanja

Content: The lecture will present the concept of search from a user and a design perspective. The lecture will introduce and discuss search concepts such as the anatomy of the search system, faceted search and search interfaces.

Literature:

Tunkelang, D. (2009). *Faceted search*. San Rafael: Morgan Claypool. (Synthesis Lectures on Information Concepts, Retrieval, and Services, 5). Available [here](#). Pp. 1-26.

Wilson, M.L. (2012). *Search User Interface Design*. San Rafael: Morgan Claypool. (Synthesis Lectures on Information Concepts, Retrieval, and Services, 20). Available [here](#). Pp. 1-80.

Kruschwitz & Hull (2017). Searching the enterprise. *Foundations and trends in information retrieval*, 11(1), ch. 2.

Russel-Rose, T. & Tate, T. (2013). *Designing the Search Experience*. Waltham: Morgan Kaufmann. Available [here](#).

Rosenfeld, L., Morville, P. & Arango, J. (2015). *Information Architecture for the Web and Beyond*. Sebastopol: O'Reilly. Ch. 9. Available [here](#).

	Required reading	Supplementary reading	Digital upload
Tunkelang, D. (2009). <i>Faceted search</i> . San Rafael: Morgan Claypool. (Synthesis Lectures on Information Concepts, Retrieval, and Services, 5). Available here . Pp. 1-26.	26 p.		
Wilson, M.L. (2012). <i>Search User Interface Design</i> . San Rafael: Morgan Claypool. (Synthesis Lectures on Information Concepts, Retrieval, and Services, 20). Available here . Pp. 1-80.		80 p.	
Kruschwitz & Hull (2017). Searching the enterprise. <i>Foundations and trends in information retrieval</i> , 11(1), ch. 2.	39 p.		
Russel-Rose, T. & Tate, T. (2013). <i>Designing the Search Experience</i> . Waltham: Morgan Kaufmann. Available here .		121 p.	
Rosenfeld, L., Morville, P. & Arango, J. (2015). <i>Information Architecture for the Web and Beyond</i> . Sebastopol: O'Reilly. Ch. 9. Available here .	57 p.		

User experience

Lecturer: Marianne

20/9. 8.15 - 10.00

Content: The lecture will introduce to the notion of user experience as an approach to the design and evaluation of information architecture. The lecture will focus on discussing how we can use principles of user experience to guide the design process.

Literature:

Hassenzahl, M. 2010. Experience design: Technology for all the right reasons. San Rafael, CAL: Morgan&Claypool Publishers.

Lykke, M., Lekkgaard, S. and Jantzen, C. (2017). Experience-Oriented Knowledge Organisation for the Transference of Scientific Knowledge from Universities to SMEs. Proceedings of the ISKO UK Fifth Biennial Conference, 11-12 July, 2017, London.

	Required reading	Supplementary reading	Digital upload
Hassenzahl, M. 2010. Experience design: Technology for all the right reasons. San Rafael, CAL: Morgan&Claypool Publishers.			x
Lykke, M., Lekkgaard, S. and Jantzen, C. (2017). Experience-Oriented Knowledge Organisation for the Transference of Scientific Knowledge from Universities to SMEs. Proceedings of the ISKO UK Fifth Biennial Conference, 11-12 July, 2017, London.	21 p.		x

Persuasive design 1

Lecturer: Sandra

Content:

This lecture provides an introduction to persuasive technologies as defined by BJ Fogg. Persuasive systems are generally understood as interactive digital devices that have been designed with the intent to change the user's attitude and/or behaviour. As such, persuasive technologies combine digital design with areas such as social psychology, classical rhetoric and learning

Literature:

	Required reading	Supplementary reading	Digital upload
Fogg, B. (1998). <i>Persuasive Computers, Perspectives and research directions</i> . CHI, ACM Press. 7 pages	7 pages		
Atkinson, B. M. C. (2006). <i>Captology: A Critical review</i> . Persuasive Technology 2006, ACM	10 pages		

Persuasive design 2

Lecturer: Sandra

Content:

This lecture expands on the subject of persuasive technology, by further elaborating on the notion of persuasive design. Particular attention is directed towards the relation between classical rhetoric and persuasion.

Literature:

	Required reading	Supplementary reading	Digital upload
Miller, G. R. (2002). On Being Persuaded, Some Basic Distinctions. <i>The Persuasion Handbook, Developments in Theory and Practice</i> . J. P. Dillard and M. Pfau. London, Sage Publications.	110 (pages)		x
Hastie, P and Christensen, A. K. (2007). <i>Classical Rhetoric and a Limit to Persuasion</i> . Persuasive Technology. Palo Alto, Springer	(4 pages)		

Persuasive design 3

Lecturer: Sandra

Content:

This lecture introduces some of the key perspectives of applied ethics, such as utilitarianism, deontology and ontology. Besides from a general introduction to these diverse approaches to ethics, the lecture will address ways to include ethics in the development and evaluation information systems.

Literature:

	Required reading	Supplementary reading	Digital upload
Gram-Hansen, S. B. (2007). "Ethics and Technology Design." <i>Ethics and Information Technology</i> 9(1): 63-72	10 pages		
Albrechtslund, A. (2007). Towards an Approach to Ethics and HCI Development, based on Legstrup's Ideas. <i>Interact, Uppsala, Springer</i>	4 pages		
Davis, J. (2009). Design methods for ethical persuasive computing. Proceedings of the 4th International Conference on Persuasive Technology, Claremont, California, ACM.	8 pages		

Evaluation exercise kick-off

Lecturers: Marianne and Tanja

Content:

Literature:

Persuasive design 4

Lecturer: Sandra

Content:

In this lecture, we tie together the different perspectives from social psychology, classical rhetoric and theories on learning and knowledge processing, in order to establish a definition of persuasive design, which is applicable not only in theory but also in practice.

Literature:

	Required reading	Supplementary reading	Digital upload
Gram-Hansen, S. B. and T. Ryberg (2013). "Persuasion, Learning and Context Adaptation." <i>Special Issue of the International Journal on Conceptual Structures and Smart Applications</i> .	9 pages		
Atkinson, B. M. C. (2006). <i>Captology: A Critical review</i> . Persuasive Technology 2006, ACM.	12 pages		

Categorization 1

Lecturer: Ann

Content: Basic-level categorizations and prototype theory

Categorization can be seen as one of the most important issues in cognition. In this session we discuss categorization from the point of view of cognitive psychology.

Literature:

	Required reading	Supplementary reading	Dig. upload
Eleanor Rosch: Principles of Categorization. In Rosch, E. & Lloyd, B.B. (eds) <i>Cognition and Categorization</i> 27-48. Hillsdale, NJ: Lawrence Erlbaum, 1978	21		
available in moodle			
Lakoff, G. (1987) <i>Women, Fire, and Dangerous Things</i> . The University of Chicago Press. chapter 2, 12-57	45		
available in moodle			

Evaluation exercise presentations and design exercise kick-off

Lecturers: Marianne and Tanja

Content:

Literature:

Categorization 2

Lecturer: Ann

Content: Categorizations and classification as infrastructures

Categories and classifications play important and invisible roles in shaping the world and our lives. In this session we discuss the consequences of various categorization system from a social, political and even ethical point of view.

Literature:

	Required reading	Supplementary reading	Dig. upload
Bowker, G.C & Star S.L.: Invisible mediators of action: Classification and the ubiquity of Standards. <i>Mind, Culture, and Activity</i> , 7:1-2, 147-163	17		
Star, S.L. & Ruhleder, K.: Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces. <i>Information Systems Research</i> , årg. 7, hft. 1, 03-1996, s. 111-134	23		
Bowker G.C. & Star S.L. (1999) <i>Sorting Things out - Classifications and its Consequences</i> Introduction and Chapter 1 (can be accessed here)	50		

Group formation

Lecturer: Tanja

Content:

Literature:


















AALBORG UNIVERSITET

WEB TECHNOLOGY AND DATABASES (KDM_KA_INFORMATIONSARKITEKTUR_AAL)

Administration 

Course administration

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(No news has been posted yet)

Upcoming events 

There are no upcoming events

[Go to calendar...](#)[New event...](#)Recent activity 

Activity since Thursday, 17 August 2017, 7:47 AM

[Full report of recent activity...](#)

No recent activity

Dashboard ► School of Music, Music Therapy, Psychology, Art, Communication & Technology (MPACT) ► Autumn 2017 ► Study Board of Communication and Digital Media - Aalborg ► 7th semester ► Information Architecture ► Web technology and databases (KDM_KA_Informationssystemarkitektur_AAL) [E17-22345]

[Turn editing on](#) Announcements

Topic 1

This is the course page of Web Technology and Databases. Welcome! The course is comprised by a set of lectures followed by work of evaluating a number of technologies. The exam wraps up the results of the technologies in individualized exams.

Teachers:

[Pär-Ola Zander](#) (module coordinator)

Tanja Svarre Jonassen

Literature: Connolly, R., & Hoar, R. (2017). *Fundamentals of web development* (2 [edition]). Boston: Pearson. (older editions are acceptable)Messier, R. (2014). *Collaboration with cloud computing: security, social media, and unified communications*. Amsterdam ; Boston: Syngress. (Chapter 2) (will be provided later)

In addition, we expect that you spend up to 150DKK in service fees, since you during the course will experiment with various web services.

 Technologies to evaluate

Lecture 1: Kick-off for the course

Preparation: Watch [Web Technology Fundamentals](#) at Lynda.com

Study guide for the file: There is a quiz in the end - take that first if you think it may be too easy for you. Ignore the "dealing with data" and "Using SQL..." - they will be covered next lecture.

Describe main course objectives. Explain the main learning approach. Explain the first-order skills that you will develop as students. Explain the second-order capabilities that you will develop.

Literature: Connolly & Hoar (2015). *Fundamentals of Web Development* (global edition). Harlow: Pearson.

Examples: HTML, clients,web servers. Internet-based APIs for accessing data. Various classes of high-layer technologies (e.g. CMSs).

Literature: Connolly & Hoar (2015). *Fundamentals of Web Development* (global edition). Harlow: Pearson.Johnson, S. B. (2003). Systems integration and the social solution of technical problems in complex systems. *The Business of Systems Integration*, 35–56.Lemay, L., Kyrnin, J., & Colburn, R. (2011). *Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day*.<http://www.w3schools.com/>

Lecture 3: Databases, practicals, and kntrroductions to the technology of search engines.

Part 1: Introduction to Databases.

- Introduction to databases
- Introduction to structured data and SQL.

Literature: Connolly & Hoar, ch 11

Part 2: Practical examples. Example of editing a script. Example of putting up a file on the web ("low-level"). Example of accessing an API.

Literature:

Janssens, J. (2014). *Data science at the command line*. O'Reilly, Sebastopol, CA. (and what technical reference literature you may find)

Part 3 - search engines

- Introduction to search engines and information retrieval
- Introduction to searching unstructured text

Literature: Connolly & Hoar, ch 20

Supplementary literature: Croft, Metzler & Strohman, ch 2, 6, 7.

Technology review process kick-off

Technology review process kick-off (starting Mon 9 October, ending 19 October)

Our work process will be described here in detail later in the course. Be prepared that your weeks will be pretty filled up in these periods during daytime, as can be seen in the schedule.

In short, we will try out different web and database technologies in small groups, and report the difficulties to class. Different groups will work with different technologies. You will be supervised in the process - not necessarily shown the correct solution, but how to systematically address the challenge. We assume that some students have very little experience with such technologies, and that others are more experienced. The process will ensure that both categories have a stimulating and challenging learning experiences.

Apart from the general literature in the outset of the course, there is no set curriculum for these activities, although you will have to consult manuals in order to evaluate the technologies.

Exam

The course is graded by a 3-day home exam. The exam will be largely based on what you have done throughout the course.

Topic 6

Topic 7

Topic 8

Topic 9

Topic 10