Skabelon for semesterbeskrivelse for uddannelser ved Aalborg Universitet

Semesterbeskrivelse 7.semester Information Studies KA-IS (Aalborg)

Oplysninger om semesteret Skole: MPACT Studienævn: Kommunikation og Digitale Medier Studieordning: Kandidatuddannelsen i Information Technology (Information Studies) 2018
Semesterets faglige profil The 7th semester of the programme comprises a 5 ECTS credits module in "Professional Inquiry", a project module of 15 ECTS credits in "User Practice, User Analysis and Pilot Studies", a 5 ECTS credits study subject module "ICT Based Data Collection and Analysis" and a 5 ECTS credits elective module.
Semesterets organisering og forløb Information studies is about designing and adapting well-reflected and useful ICT solutions I various context. In this semester focus is on analysis of ICT in Practice. The courses and activities provide the students with theories and methods to understand and examine users and use practices in organizational and social contexts. Thus, the emphasis is on under-standing the ICT use practice and the potential of change.
Semesterkoordinator og sekretariatsdækning Semesterkoordinator: Ann Bygholm Studiesekretær: Pia Knudsen

Modulbeskrivelse

Modultitel, ECTS-angivelse "User Practice, User Analysis and Pilot Studies" 15 ECTS-point.
Placering 7. Semester
Modulansvarlig Ann Bygholm
Type og sprog Projektmodul Engelsk
Mål **Knowledge of:** • theory and methods as regards the understanding of human practice and more specifically user practice in relation to technology use at the highest international level • digital culture and practice, cultural and social phenomena related to ICT use • cognitive, conative and emotive aspects of ICT use

• the structuring of user analyses and pilot studies directed towards various domains and processes within work life, learning and knowledge sharing.

Skills in:

• assessing strategies and methods for user analyses and pilot studies on the basis of the needs of the study and knowledge of the disciplinary theories and methods.
• choosing suitable strategies and methods for user analyses and pilot studies directed towards various domains
• data collection and analysis as regards user analysis and pilot studies
• communicating user analyses and pilot studies to peers and others.

Competences in:

• taking an analytical, reflective and critical approach to the preconditions for user analyses and pilot studies
• taking an analytical, reflective and critical approach to user analyses and pilot studies
• engaging in disciplinary and interdisciplinary collaboration on user analyses and pilot studies, with a professional approach
• identifying own learning needs and structuring own learning in relation to the subject area of user analysis for pilot studies.

Fagindhold

Through the module, students will acquire knowledge, skills and competences in relation to the areas of user analysis and pilot studies with particular emphasis on user analysis and pilot studies in relation to the development of ICT for supporting work, knowledge and learning processes.

The module will introduce students to user analysis, user-system interaction and pilot studies within the fields of ICT innovation, design and development, which are areas of core competence within the field of informatics. This includes acquisition and application of knowledge on digital practice, organisational culture, digital culture and cognitive, conative and emotive aspects of the undertaking of user analyses and pilot studies with a view to qualifying operational processes and organisational change.

The module comprises teaching within the following areas:

• user practice, user analysis and pilot studies – theory of science and theory
• data collection and analysis methods
• user practice, user analysis and pilot studies in specific domains

Academic supervision will be offered in connection with the problem oriented project work.

Omfang og forventet arbejdsindsats
Modulet udgør 15 ECTS points. 1 ECTS point svarer til 27,5 times arbejde, og 15 ECTS point svarer således til 412,5 arbejdstimer bestående af forberedelse til undervisning, undervisningsdeltagelse, gruppearbejde, øvelser, vejledning og eksamener

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Modulaktiviteter (kursusgange med videre)

NEDENSTÅENDE UDFORMES I MOODLE

En beskrivelse af hvordan fagindholdet udmøntes for det kommende semester samt en beskrivelse af andre særlige forhold der gør sig gældende for det specifikke semester (fx organisatoriske, strukturelle, studiemæssige m.m.)
En redegørelse for afløsning ved aktiv deltagelse (hvis det er en eksamensmulighed)
En oversigt over modulets undervisere
Link til gældende skema

For hver undervisningsaktivitet (eksempelvis kursusgange, workshops med videre) angives:
- *Undervisningens karakter (forelæsning, workshop, øvelse, gruppearbejde etc.)*
- *Undervisningsaktivitetens titel og nummer (i nævnte rækkefølge), kortfattet beskrivelse af aktiviteten*

- *Underviser(e)*
- *Angivelse af anvendt og anbefalet litteratur – herunder en samlet opgørelse over antal sider, samt hvilke tekster der uploades (nedenstående tabel anvendes)*
- *Slides og øvrige ressourcer*

Eksamen

Examination 2

An external oral examination in: "User Practice, User Analysis and Pilot Studies".

The examination is a conversation between the student(s) and the examiner and external examiner based on a project report produced individually or in a group. 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.

Literature foundation: Minimum 1000 standard pages supervisor approved, self-selected literature related to the project.

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.

Duration of examination: 20 minutes per student and 10 minutes per group for assessment and announcement of result, although no longer than a total of two hours. 30 minutes in total for individual examinations.

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.

Credits: 15 ECTS.

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

In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.

Any re-examinations will be held on the basis of a revised project report.

Modulbeskrivelse

Modultitel, ECTS-angivelse

"Professional Inquiry"

5 ECTS

Placering

7. Semester

Modulansvarlig

Heilyn Camacho

Type og sprog

Studiefagsmodul

Engelsk

Mål

Knowledge of:

• the connections and differences between empirical inquiry and research questions based on informatics
• the connection between research questions and the theory of science in the organisation of scientific research
• theory of science within the field of informatics

Skills in:

• describing empirical inquiry
• translating empirical inquiry into a scientific research question within the field of informatics
• combining a scientific research question with the theoretical basis of its investigation.

Competences in:

• preparing scientific research based on personal enquiry
• taking a reflective approach to the basis of scientific inquiry
• engaging in disciplinary collaboration on scientific problem formulation

Fagindhold

The module comprises the development and phrasing of empirical inquiry for the purpose of enabling students to formulate research questions and scientific problems within the field of informatics. This will form the basis of the problem based project work and inquiries to be carried out during the course of the informatics study programme.

Omfang og forventet arbejdsindsats

Modulet udgør 5 ECTS points. 1 ECTS point svarer til 27,5 times arbejde, og 5 ECTS point svarer således til 137,5 arbejdstimer bestående af forberedelse til undervisning, undervisningsdeltagelse, gruppearbejde, øvelser, vejledning og eksamener

Modulaktiviteter (kursusgange med videre)

NEDENSTÅENDE UDFORMES I MOODLE

En beskrivelse af hvordan fagindholdet udmøntes for det kommende semester samt en beskrivelse af andre særlige forhold der gør sig gældende for det specifikke semester (fx organisatoriske, strukturelle, studiemæssige m.m.)
En redegørelse for afløsning ved aktiv deltagelse (hvis det er en eksamensmulighed)
En oversigt over modulets undervisere
Link til gældende skema

For hver undervisningsaktivitet (eksempelvis kursusgange, workshops med videre) angives:
- *Undervisningens karakter (forelæsning, workshop, øvelse, gruppearbejde etc.)*
- *Undervisningsaktivitetens titel og nummer (i nævnte rækkefølge), kortfattet beskrivelse af aktiviteten (kursusmanchet) samt aktivitetens relation til modulets læringsmål*
- *Underviser(e)*
- *Angivelse af anvendt og anbefalet litteratur – herunder en samlet opgørelse over antal sider, samt hvilke tekster der uploades (nedenstående tabel anvendes)*
- *Slides og øvrige ressourcer*

Eksamen

Examination 1
An internal written examination in English in "Professional Inquiry" The examination is a three day take-home assignment on a set topic.
Evaluation: pass/fail.
On the basis of the module, students will respond to one or a number of questions and assignments within the subject area of the module. The assignment paper must not exceed eight pages, and it must be prepared individually.

The assignment paper must demonstrate that the student fulfils the objectives for the module stated above. Alternatively, the examination may be completed by satisfactory and active participation in the module, i.e. a minimum of 80% attendance and completion of set tasks.

Modulbeskrivelse

Modultitel, ECTS-angivelse

"ICT Based Data Collection and Analysis"
5 ECTS

Placering 7. Semester
Modulansvarlig Mette Skov
Type og sprog Studiefagsmodul Engelsk
Mål **Knowledge of:** • theories and methods at the highest international level as regards qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies • ICT systems for data collection and analysis in relation to user analyses and pilot studies • principles, including ethical principles, for managing ICT systems for data collection and analysis in relation to user analyses and pilot studies. **Skills in:** • assessing and selecting a method for qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies • selecting, configuring and adapting ICT systems for qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies • communicating methods for ICT based data collection and analysis to peers and laymen • communicating results on ICT based data collection and analysis to peers and laymen. **Competences in:** • taking an analytical, reflective and critical approach to qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies • engaging in interdisciplinary collaboration on ICT based data collection and analysis in relation to user analyses and pilot studies • identifying own learning needs and structuring own learning in relation to the subject area of ICT based data collection and analysis in relation to user analyses and pilot studies.
Fagindhold The module will introduce students to ICT based data collection and analysis offering a number of opportunities to obtain vast amounts of data on the use of for example Web based ICT solutions with relative ease. These opportunities call for fundamental consideration of options and problems, including ethical concerns on the significance of the potentially extensive mappings of individual user behaviour. During the course of the module, students will engage in ICT based data collection and analysis for the support of ICT user analyses and pilot projects. The module comprises courses and exercises within the following areas: • theory and method within ICT based data collection and analysis • tools for ICT based data collection and analysis
Omfang og forventet arbejdsindsats Modulet udgør 5 ECTS points. 1 ECTS point svarer til 27,5 times arbejde, og 5 ECTS point svarer således til 137,5 arbejdstimer bestående af forberedelse til undervisning, undervisningsdeltagelse, gruppearbejde, øvelser, vejledning og eksamener
Modulaktiviteter (kursusgange med videre) **NEDENSTÅENDE UDFORMES I MOODLE** En beskrivelse af hvordan fagindholdet udmøntes for det kommende semester samt en beskrivelse af andre særlige forhold der gør sig gældende for det specifikke semester (fx organisatoriske, strukturelle, studiemæssi-

ge m.m.)
En redegørelse for afløsning ved aktiv deltagelse (hvis det er en eksamensmulighed)
En oversigt over modulets undervisere
Link til gældende skema

For hver undervisningsaktivitet (eksempelvis kursusgange, workshops med videre) angives:

- *Undervisningens karakter (forelæsning, workshop, øvelse, gruppearbejde etc.)*
- *Undervisningsaktivitetens titel og nummer (i nævnte rækkefølge), kortfattet beskrivelse af aktiviteten (kursusmanchet) samt aktivitetens relation til modulets læringsmål*
- *Underviser(e)*
- *Angivelse af anvendt og anbefalet litteratur – herunder en samlet opgørelse over antal sider, samt hvilke tekster der uploades (nedenstående tabel anvendes)*
- *Slides og øvrige ressourcer*

Eksamen
Examination 3
An internal written examination in English in "ICT Based Data Collection and Analysis".
The examination is a three-day take-home assignment on a set topic.
On the basis of the module, students will respond to one or a number of questions and assignments within the subject area of the module. The assignment paper must not exceed eight pages, and it must be prepared individually.

Evaluation: Grading according to the 7-point scale.

The study elements on which the examination is based is equivalent to 5 ECTS.

In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.

ICT BASED DATA COLLECTION AND ANALYSIS (KDM_KA_INFORMATIONSVIDENSKAB_AAL)

Welcome to the module in ICT based Data Collection and Analysis

This module introduces theories, methods and tools within the area of ICT based Data Collection and Analysis, offering a range of possibilities of collecting large amounts of data regarding the use of e.g. web-based ICT solutions. These possibilities call for fundamental consideration of options and problems, including ethical concers on the significance of the potentially extensive mappings of individual user behaviour. The students are expected to engage in ICT based data collection and analysis for the support of ICT user analysis and pilot studies.

The module comprises courses and excersises within the following:

- Theory and method within ICT based data collection and analysis
- Tools for ICT based data collection and analysis

You can read more about the module in the study regulation.

The course module is completed with a set, individual internal written exam (max. 8 pages) graded according to the seven-point grading scale. The student is given 7 days to complete the assignment.

We recommend that you buy the following book on research methods:

- Bryman, A. (2016). *Social research methods (*5th ed.*).* Oxford University Press.
(You can also use the 4th edition of Bryman's book from 2012)

Module coordinator: Mette Skov (skov@hum.aau.dk)

Announcements

Discussion Forum

Introduction to ICT based data collection and analysis

Lecturer: Mette Skov

Date and time: t.b.a

The first lecture will introduce to ICT based forms of data in HCI such as big data, log data, sensor data etc.

Literature:	Mandatory literature	Additional literature	Dig. upload
Boyd, D., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, communication & society*, *15*(5), 662-679. (AUB online access).	18		
Bryman, A. (2015). *Social research methods*. Oxford University	35		

Press. Chapter 3 (Research designs)	
Total	53

Quantitative data and analysis

Lecturer: Tanja Svarre Jonasen

Date and time: t.b.a

The two lectures concerns quantitative data analysis. The first lecture presents the nature of quantitative research, quantitative data collection, and data analysis (statistics and visualization). The lecture also includes hands-in SPSS on the basis of data colected by the students on UX in mobile banking. The second lecture continues the exercises and the students present their work with data in SPSS.

If you haven't allready installed SPSS on your machines, please download it from software.aau.dk ahead of the first lecture.

Literature:

	Obligatorisk litt. sideantal	Supplerende litt. sideantal	Dig. Upload
Bryman, A. (2016). Social research methods. Oxofrd University Press. Chapter 7 "The nature of quantitative research, chapter 8 "Sampling", Chaper 15 "Quantitative data analysis", Chapter 16 "Using SPSS for Windows".	94 p.		

Computer-assisted qualitative analysis I

Lecturer: Mette Skov

Date and time: t.b.a

Empirical qualitative research often generates large amounts of data in the form of field notes, interview transcripts, data from open-ended questionnaires etc. In three lectures we will work with computer-assisted qualitative data analysis (CAQDAS) using the Nvivo software.

In this first lecture on CAQDAS we will discuss the nature of qualitative research and start working with Nvivo using a student generated, shared data set.

Bring your laptops and please install Nvivo beforehand (free campus license can be downloaded here: http://www.ekstranet.its.aau.dk/software/nvivo/download-nvivo).

Literature:	Mandatory literature	Additional literature	Dig. upload

Literature:	Mandatory literature	Additional literature	Dig. upload
Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press (4th ed.). Chapter 17 (The nature of qualitative research), Chapter 18 (Sampling in qualitative research), Chapter 24 (Qualitative data analysis) and Chapter 25 (Computer-assisted qualitative data analysis: using Nvivo).	100		
Gibbs, G. (2007). *Analyzing Qualitative Data*. London, England. Chapter 4 (Thematic coding and categorization). Access via Aalborg University Library.	19		
Preece, J., Sharp, H., & Rogers, Y. (2015). *Interaction design: beyond human-computer interaction* (4th ed.). Hoboken NJ : John Wiley & Sons. Chapter 7 (Data gathering) and chapter 8 (Data analysis , interpretation, and presentation). (This book is available full text online through Aalborg University Library).	90		
Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press (4th ed.). Chapter 20 (Interviewing in qualitative research)		30	
Total	209		

Computer-assisted qualitative analysis II

Lecturer: Mette Skov

Date and time: t.b.a

In the second lecture on CAQDAS we will continue working hands-on with NVIVO. There will be an exercise on thematic coding and analysis of ethnographic field notes.

Literature:	Mandatory literature	Additional literature	Dig. upload
Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press (4th ed.). Chapter 19 (Ethnography and participant observation)	37		
Total	37		

Computer-assisted qualitative analysis III

Lecturer: Mette Skov

Date and time: t.b.a

In this third lecture on CAQDAS the students will present the two Nvivo exercises and reflect on the advantages and challenges of using a software for qualitative data analysis.

Literature: The same as in CAQDAS lecture I + II

Module evaluation

Lecturer: Mette Skov

Date and time: t.b.a

In this closing lecture, students can ask question about the written exam and evaluate the module.

PROFESSIONAL INQUIRY MODULE

Module description

The module presents PBL as pedagogical model *and* as a backbone of research practice. Students learn through hands on exercise and critical reflection how to make problem formulation their driver of inquiry. The course highlights how to treat a "problem" theoretically, through empirical investigation, all within the field of Information Studies. The module will use a framework we call "Professional Inquirer in the PBL way" as a map of the landscape of knowledge and skills to be acquired through the course.

Module title and ECTS

Professional Inquiry - *5 ECTS*

Location

7th semester HCI - Study board Communication and Digital Media

Module coordinator

Heilyn Camacho hcamacho@hum.aau.dk

Teachers

Heilyn Camacho hcamacho@hum.aau.dk

Type and language

Study module - English

Objectives

Following the study regulation (http://www.fak.hum.aau.dk/digitalAssets/288/288826_ka_information-studies_2017_hum_aau.dk.pdf) students will have the opportunity to acquire:

- *knowledge* of the connections and differences between empirical inquiry and theoretical inquiry in scientific research within the field of informatics.
- *skills* in describing and combining empirical and theoretical research
- *competences* in taking a reflective approach to the basis of scientific inquiry

Content

The master study has as its overall objective to educate graduates to become capable of adapting and developing ICT solutions to end user practices within organisational context - and reflect critically upon current practice, and develop and present alternatives. Students do not become professional inquirers by following this course module, but students can learn how to – in the course of their ongoing study practice – become professional inquirers. Professional inquiry is very much a communicative collaborative act of going back and forth over arguments, in acts of listening and questioning. Each module-session deals with

one of the constituents of professional inquiry: knowing the research field, the research tools and how to critically reflect upon research. This knowledge is accumulative, the themes are linked, and students cannot skip participating actively.

The topics covered are (one session per each topic):

· Topic 1: Professional Inquiry in the PBL way – session 1

· Topic 2: Scholarly ways of reading and writing – session 2

· Topic 3: Your identity as professional inquirer - session 3

· Topic 4: The communicative and collaborative act of going back and forth over arguments session 4

· Topic 5: The process of problem formulation – session 5

· Topic 6: Fact checking and fact presentation – session 6

Relation to other Modules

This module offers a basis for professional inquiry in the context of problem-based project work throughout the different semesters of the master programme in Information Studies

Scope and expectations

The module equals 5 ECTS points corresponding to a student workload of app. 137,5 working hours. The teachers enforce a study practice where literature is read before class, and assignments are carefully prepared.

Requirements

Completed bachelor's degree in Communication and Digital Media with specialization in Information Studies (Informationsvidenskab) or another relevant bachelor's degree or professional bachelor's degree.

Participants

Students from 7th Semester of Information Studies master programme

Examination

An internal written examination in English in "Professional Inquiry". The examination is a seven-day take-home assignment on a set topic. Evaluation: pass/fail.

The assignment paper must demonstrate that the student fulfils the objectives for the module stated above. Alternatively, the examination may be completed by satisfactory and active participation in the module, which demands:

1. Attending 80% of the course sessions

2. Handing in 2 journal entries

3. Leading a critical discussion of an academic paper (as a member of a group)

4. Being a peer reviewer (one journal entry)

Module activities

Face to face sessions: The course is composed of 6 face to face sessions (between 2 and 4 hours). Each session comprises lecture, workshop, discussions led by students as detailed below.

Reflective Journal: Students should write 2 entries to a reflective journal: 1) what is the identity of a professional inquirer – theoretical discussion and 2) analysis of possible applications of the Lego Serious Play tool in professional inquiry

Critical reading: in groups, students lead an academic discussion of a selected paper

Peer review: students read each other entries and give feedback following a specific rubric developed for this course.

📢 Announcements

📢 Meddelelser

👥 Attendance

Session 1: Professional Inquiry in the PBL way

In the first session, we introduce the students to the aim of the course and the key skills required to become a professional inquirer within the PBL approach. In the end of the session participants should be able to understand the interlink between theory, tools and data to investigate a specific field using PBL approach.

Activities:

1. Course introduction

2. Lecture: "PBL as pedagogical method and as research approach"

3. Critical discussion of a scientific article by Heilyn Camacho

4. From theory in action to espouse theory (exercise)

Literature:

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Jan Fook (2012) The Challenges of Creating Critically Reflective Groups, Social Work With Groups, 35:3, 218-234	18		
Guerra, A., & Holgaard, J. (2016). Enhancing Critical Thinking in a PBL Environment. *International Journal of Engineering Education,* *32*(1), 424–437.	13		
Kjersdam, F., & Enemark, Stig. (1994). *The Aalborg experiment: Project innovation in university education*. Aalborg: The faculty of technology and science, Aalborg University & Aalborg University Press. From page 13-17.	5		x

	Obligatory Number of pages		
Piokela, E. (2005). Knowledge, knowing and problem based learning – some epistemological and ontological remarks. In: Piokela, E. and Nummenmaa, A. (editors). Understanding Problem-based Learning. Tempere University Press. Finland, pp 15-32	17		
	53	0	1

Session 2: Scholarly ways of reading and writing

In this session, we focus on reading and writing skills. We will work with tips and tricks to help students meet scholarly standards. *At the end of the session, participants should be able to evaluate their reading and writing practice as a professional inquirer*.

Activities:

1.   Intro to reading, reading practice, sharing

2.   Intro to writing, writing practice, sharing

3.   Paper discussion (students lead the discussion)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Neil Selwyn, Learning, Media and Technology (2013): 'So What?' … a question that every journal article needs to answer, Learning, Media and Technology, pp 1-5.	7		
Johanson, L. (2007). Sitting in Your Reader's Chair: Attending to Your Academic Sensemakers. Journal of Management Inquiry, 16(3), 290-294	5		
Papadakis E. (1983). Why and What for?: the basis for writing a good Introduction. Materials Evaluation. Vol 41. pp 20-21	2		
Richard Scriven, (1984) "Learning Circles", Journal of European Industrial Training, Vol. 8 Issue: 1, pp.17-20	4		
Gardiner, M. & Kearns, H. (2012) The ABCDE of Writing: Coaching high-quality high-quantity writing. International Coaching Psychology Review. Vol. 7 No. 2 September 2012, pp. 237-249	12		
Mackenzie, N., & Knipe, S (2006). Research Dilemmas: Paradigms, Methods and Methodology. Issues in Educational Research, 16(2), 193-205	12		

	42	0	0

Session 3: The identity of the professional inquirer (part one)

Session 3 aims to get a deeper theoretical and practical understanding of the field of professional inquiry and the skills and competences of a professional inquirer. At the end of the sessions, participants should be able to answer the question: What is expected from me when performing as a professional inquirer?

Activities session 3:

1. LSP workshop: Identifying the key concepts, skills and competences of professional inquiry (the workshop last 3 hours and it includes some short lecturing)

2. Paper discussion (students lead the discussion)

Literature

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Hamby, B. (2013). "Willingness to inquire: the cardinal critical thinking virtue". Ontario Society for the Study of Argumentation Conference. May 22nd – 25th). University of Windsor.	15		
Argyris, C., Putnam, R. and McLain, D. (1985). Action Science: Concepts, Methods, and Skills for Research and Interventions. Jossey-Bass. Chapter 3. Access here	23		
Revans, R. (1998). ABC of Action Learning (Review edited of 1983 edition ed.). London: Lemons & Crane.	120		
	158		0

Session 4: The communicative and collaborative act of going back and forth over arguments

In this session students will put to practice the knowledge acquired in session 2: reading and writing within the academic community. In this session one groups will be in charge of doing a critical discussion of a paper within the topic of "methods for professional inquiry". Feedback will be provided after each presentation. The aim is to generate and steer an academic discussion about the different methods. Furthermore, the topic of problem formulation will be introduced.

Activities

1. Paper discussion (students lead the discussion)

2. Lecture: "Sound arguments"
3. Group exercise: the arguments for our semester project

Literature:

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Van Gelder, T. (2015). Using Argument Mapping to Improve Critical Thinking Skills. In: Barnett, R and Davies, M (editors). The Palgrave Handbook ofCritical Thinking in Higher Education, pp. 183-192	11		
Frølunde, L. (2014). Reflexive Learning through Visual Methods. In J. Simonsen, C. Svabo, S. M. Strandvad, K. Samson, M. Hertzum, & O. E. Hansen (Eds.), Situated Design Methods (Chapter 9, pp. 161-180). Cambridge, MA: MIT Press	19		X
Randolph, Justus J. (2009). A Guide to Writing the Dissertation Literature Review. *Practical Assessment, Research & Evaluation, 14*(13), 1-13.	13		
	43	0	1

Session 5: The process of problem formulation

In this session, we continue with the problem formulation process and discussion of papers led by the students. In the end of the session participants should be able to answer the question: What tools to use when to develop a proper problem formulation, that is a problem formulation that can guide professional inquiry and develop as the work progresses

Activities:

1.   Paper discussion (students lead the discussion)

3.   Lecture: problem formulation

2.   Hands-on activities of problem formulation, continuing from the previous session and in relation to students' own projects.

Literature:

		Supplementary

	Obligatory Number of pages	Number of pages	Dig. upload
Bitsch Olsen, P., & Pedersen, Kaare. (2008). *Problem-oriented project work : A workbook* (2.nd ed.). Frederiksberg: Roskilde University Press. pp. 9-43	33		
Brandt, E., Binder, T. & L. Sanders (2012).Tools and Techniques in: Simonsen, J. & Robertson eds. (2012) Routledge International Handbook of Participatory Design, Routledge, pp. 145-182	37		
Chenai, R. (2011). Ten Steps for Conceptualizing and Conducting Qualitative Research Studies in a Pragmatically Curious Manner. The Qualitative Report, Vol. 16, No. 6. pp 1713-1730	18		
Marquardt, M., & Yeo, Roland K. (2012). *Breakthrough problem solving with action learning: Concepts and cases*. Stanford, California: Stanford Business Books. Pages 30-60	30		
	118		

Session 6: Fact checking and facts presentation

The topic for this session is fact checking and fact presentation. *In the end of the session participants should be able to answer the question:* How to argue sufficiently, within PBL framework, for the methods chosen?

Activities

1. Lecture: "The concept of truth in professional inquiry"

2. Critical review of entry 2 (peer review activity)

Literature:

	Obligatory Number of pages	Supplementary Number of pages	Dig. upload
Bryman, A. (2016) Mixed methods research, in Social Research Methods, Oxford University Press, pp. 634-660	26		
Greene, J., Caracelli, V., & Graham, W. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. Educational Evaluation and Policy Analysis, 11(3), 255-274	20		

Barton, G., & James, A. (2017). Threshold Concepts, LEGO® SERIOUS PLAY® and whole systems thinking: towards a combined methodology. Practice and Evidence of Scholarship of Teaching and Learning in Higher Education, 12(2), 249–271.	22		
Bjørndahl, J., Fusaroli, R., Østergaard, S., & Tylén, K. (2014). Thinking together with material representations: Joint epistemic actions in creative problem-solving. Cognitive Semiotics, 7(1), 103-123.	20		
	88	0	0

USER PRACTICE, USER ANALYSIS AND PILOT STUDIES (KDM_KA_INFORMATIONSVIDENSKAB_AAL)

General

User Practice, User Analysis and Pilot Studies

Teachers: Pernille Andersen, Sandra Burri Gram Hansen og Ann Bygholm

Course description:

This module introduces theories and methods relevant for analysis of user practice, user–system interaction, and for pilot studies related to ICT innovation, design and development. The course activities are planned as a series of lectures, casework and discussions, and will help the student in

- Gaining knowledge about the theoretical and methodological issues of studying human practices especially in the context of technology use within different domains.
- Evaluating, choosing and reflecting on strategies and methods of user analysis, and collecting and analyzing data.

The module as a whole is completed through an external, combined written and oral examination based on a project report prepared by one or more student(s). The project report requires a minimum of 15 pages per student and may not exceed 20 pages per student (max. 30 pages in individually prepared reports).

Recommended literature

Important textbooks for the course:

Holtzblatt, K. & Beyer, H. (2017) Contextual Design, second edition. Morgan Kaufmann, Elsevier. (avaiable for download at Aalborg University Library

Nicolini, Davide (2012). *Practice Theory, Work, and Organization – An introduction.* Oxford University Press. (available for download at Aalborg University Libreary)

Additional literature appears from the description of the individual course sessions.

Reading Guide

In some of the lessons, we will zoom in on articles for more thorough examination. The reading guide (see below) consists of a set of questions that you should use when reading those texts (and a good guide to reading all of them as well).

For articles via "AUB link" you need to be logged in through AUB and for others to access/be on AAUs network or VPN.

Below a list supplementary literature (something you could read not should)

Rogers, Y., Sharp, H., & Preece, J. (2007). Interaction Design: Beyond Human Computer Interaction. (accessible online through Aalborg University Library and at the university bookstore)

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. Qualitative inquiry (10), 837-851. (available through Aalborg University Library)

Klein, H. K., & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. (available through Aalborg University Library)

Dourish, P. (2004). Where the action is: the foundations of embodied interaction. The MIT Press. (accessible through Aalborg University Library or bookstores)

📢 Announcements

📁 reading guide and general material

Topic 1

Understanding users and use practices

This class introduce the concept of practice and discuss why a practice-based approach is valuable in relation to ICT innovation, design and development. Also, it situates the programme of Information Studies within these traditions. Furthermore, contextual inquiry is introduced as a method to gain knowledge on user practices.

Literature	Mandatory	Secondary
Hotlzblatt, K. & Beyer, H. (2017) Contextual Design, second edition, Design for Life. Morgan Kaufman Elsevier. Chapter 1-3.	80p	
Nicolini, D. (2012). *Practice Theory, Work, and Organization – An introduction.* Oxford University Press. Chapter 1.	22p	

Topic 2

Understanding users and use practices

I this class methods and techniques for interpreting data from contextual inquiry and other sources are introduced and discussed including the affinity diagram. We also examine the concept of practice theory in order to understand how this can function as "handles" for doing empirical research.

Literature	Mandatory	Secondary
Hotlzblatt, K. & Beyer, H. (2017) Contextual Design, second edition, Design for Life. Morgan Kaufman Elsevier. Chapter 4-7.	66	
Nicolini, D. (2012). *Practice Theory, Work, and Organization – An introduction.* Oxford University Press. Chapter 2.	20	

Topic 3

Understanding users and use practices

I this session we work with building experience models from contextual design to represent and analyze data. We also from a more theoretical perspective discuss practice as tradition and community.

Literature	Mandatory	Secondary

Literature	Mandatory	Secondary
Hotlzblatt, K. & Beyer, H. (2017) Contextual Design, second edition, Design for Life. Morgan Kaufman Elsevier. Chapter 7.	60	
Nicolini, D. (2012). *Practice Theory, Work, and Organization – An introduction.* Oxford University Press. Chapter 4.	37	

Topic 4

Understanding users and use practices

Continuing our work using models to represent and analyze user practice, here focusing on traditional models from contextual design. We also continue our examination of practice theory – practice as activity

Literature	Mandatory	Secondary
Hotlzblatt, K. & Beyer, H. (2017) Contextual Design, second edition, Design for Life. Morgan Kaufman Elsevier. Chapter 8.	60	
Nicolini, D. (2012). *Practice Theory, Work, and Organization – An introduction.* Oxford University Press. Chapter 5.	31	

Topic 5

Participatory Inquiry – Introduction

v. Pernille V. K. Andersen

This class introduces different principles and practices of Participatory Inquiry. In specific we will discuss different mind-sets and approaches towards participatory inquiry and the consequences hereof in terms of how people are invited into jointly explore, discuss, and define a practice and different problem perceptions within this practice.

Literature:

	Mandatory lit. no of p.	Sec. lit. no of p.	Dig. upload
Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, *4*(1), 5–18. https://doi.org/10.1080/15710880701875068 (Online access via aub.aau.dk	13		0
Steen, M. (2013). Co-design as a process of joint inquiry and imagination. *Design Issues*, *29*(2), 16–28. (Online access via aub.aau.dk)	12		0
Simonsen, J., & Robertson, T. (Eds.). (2013). *Routledge international handbook of participatory design*. New York: Routledge (Introduction, p 1-17 + Chapter 1, p. 1-19,	64		0

Chapter 2, p. 21 - 36 + Chapter 6, p. 117-145))

Topic 6

Participatory Inquiry – introduction to tools and techniques of participatory inquiry

v. Pernille V. K. Andersen

This class will give an introduction to tools and techniques of participatory inquiry. Focus will be on tangible and visual artefacts/techniques and their communicative, mediating and generative qualities. We will discuss how artefacts can be used in different settings to access and collect data as well as to challenge knowledge derived from different domains and practices.

	Mandatory lit. no of p.	Sec. lit. no of p.	Dig. upload
Muller, M. J., & Druin, J. A. (2012). Participatory Design. The Third Space In J. A. Jacko (Ed.), *The Human-Computer Interaction Handbook 3rd Edition*: CRC Press. (p. 1125-1153) (can be found in folder below)	28		1
Simonsen, J., & Robertson, T. (Eds.). (2013). *Routledge international handbook of participatory design*. New York: Routledge (Chapter 7, p. 145-181) (can be found in folder below)	36		1
Anne Marie Kanstrup, Pernille Bertelsen, and Jacob Østergaard Madsen. 2014. Design with the feet: walking methods and participatory design. In *Proceedings of the 13th Participatory Design Conference: Research Papers - Volume 1* (PDC '14), Vol. 1. ACM, New York, NY, USA, 51-60. DOI: http://dx.doi.org/10.1145/2661435.2661441 (online access via aub.aau.dk)	9		0

Topic 7

Participatory Inquiry – Design Games

v. Pernille V. K. Andersen

In this class we will explore the concept of design games as a tool, a mind-set and a structure for user involvement in participatory inquiry. We will explore and discuss fundamental principles of how to design and use different forms of design games as a way to facilitate participatory inquiry.

	Mandatory lit. no of p.	Sec. lit. no of p.	Dig. upload
Brandt, E. (2006). *Designing exploratory design games: a framework for participation in Participatory Design?* Paper presented at the Proceedings of the ninth conference on Participatory design: Expanding boundaries in design - Volume 1, 57-66 , Trento, Italy (online access via aub.aau.dk)	10		0
Vaajakallio, K., & Mattelmäki, T. (2014). Design games in codesign: as a tool, a mindset and a structure. *CoDesign*, *10*(1), 63–77. (online access via aub.aau.dk)	15		0
Gray, D., Brown, S., & Macanufo, J. (2010). Gamestorming: A Playbook for Innovators, rulebreakers, and Changemakers, O'Reilly Media. (chapter 1 and 2, see folder below)	40		40
Eriksen, M. A., Brandt, E., Mattelm, T., & Vaajakallio, K. (2014). *Taking design games seriously: re-connecting situated power relations of people and materials*. Paper presented at the Proceedings of the 13th Participatory Design Conference: Research Papers - Volume 1, Windhoek, Namibia. (online access via aub.aau.dk)	10		

Topic 8

Participatory Inquiry – Cultural Probes

v. Pernille V. K. Andersen

In this class we will address cultural probes as an exploratory research method and a provocative instrument. We will explore different ways in which cultural probes can be applied to inspire new forms of self-understanding and communication about users own practices, thoughts and interactions.

	Mandatory lit. no of p.	Sec. lit. no of p.	Dig. upload
Mattelmäki, T. (2005). Applying probes – from	19		0

inspirational notes to collaborative insights. *CoDesign,* 1(2), 83–102. (online access via aub.aau.dk)		
Graham, C., Rouncefield, M., Gibbs, M., Vetere, F., & Cheverst, K. (2007). How probes work (p. 29 - 37). ACM Press. https://doi.org/10.1145/1324892.1324899 (online access via aub.aau.dk)	9	0
Brown, M., Tsai, A., Baurley, S., Koppe, T., Lawson, G., Martin, J., … Arunachalam, U. (2014). Using Cultural Probes to Inform the Design of Assistive Technologies. In M. Kurosu (Ed.), *Human-Computer Interaction. Theories, Methods, and Tools* (Vol. 8510, pp. 35–46). Cham: Springer International Publishing. (online access via aub.aau.dk)	11	0

Topic 9

Applied Ethics

v. Sandra Burri Gram-Hansen

This lecture introduces some of the key perspectives of applied ethics, such as utilitarianism, deontology and ontology. Apart 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.

Litterature:

	Mandatory reading	Supplementary reading
Albrechtslund, A. (2007). "Ethics and Technology Design." Ethics and Information Technology **9**(1): 63-72	10	
Davis, J. (2009). Design methods for ethical persuasive computing. Proceedings of the 4th International Conference on Persuasive Technology. Claremont, California, ACM.	8	
Gram-Hansen, S. B. and T. Ryberg (2015). From participatory Design and Ontological Ethics, Towards an approach to Constructive Ethics. Ethicomp 2015. Leicester, ACM SIGCAS.	6	

Topic 10

Ethical considerations in Data Management

v. Sandra Burri Gram-Hansen

This lecture will elaborate on the introduction to ethics, by discussing practical implications and potential of ethical considerations. Moreover, a particular focus is placed on the new Data Protection Act, which came to force in 2018. What are the implications, and how does it effect the work of researchers, designers and developers in Denmark as well as internationally?

Literature:

	Mandatory reading	Supplementory reading
Markham, A. N. (2006). Ethic as method, method as ethic: A case for reflexivity in qualitative ICT research. *Journal of Information Ethics,* , 37-54. Retrieved from https://search-proquest-com.zorac.aub.aau.dk/docview/1681850245?accountid=8144	17	

Topic 11

Behaviour Design

v. Sandra Burri Gram-Hansen

Information studies can be broadly recognized as field in which research and practice focuses on not only HCI, but also on ways in which designs may help bridge between physical and digital realms. With a distinct focus on organisational contexts, this lecture introduces different approaches to behaviour design, which all share the characteristic that successful designs are dependent on thorough insights regarding both the intended user and the intended use context.

Litterature:

	Mandatory reading	Supplementary reading
Philip, J. K., et al. (2014). "The elaboration likelihood model: review, critique and research agenda." European Journal of Marketing **48**(11/12): 2033-2050.	22	
Wendel, S. (2014) Designing for Behavior Change, Applying Psychology and behavioral economics, O'Reilly, Chp 1-3	66	
Miller, G. R. (2002). On Being Persuaded, Some Basic Distinctions. The Persuasion Handbook, Developments in Theory and Practice. J. P. Dillard and M. Pfau. London, Saga Publications.	13	

Topic 12

Research Design

v. Sandra Burry Gram-Hansen

This lecture discusses the distinctions between methods and methodologies and the academic requirements of not only a design methodology but also a research design.

Rather than focus solely on doing either qualitative or quantitative studies, researchers are most often required to combine methods in order to fully address the problems they have targeted. This lecture introduces established research designs such as Design Based Research and Action Research as well as discuss the nature of academic writing and critical thinking.

Literature:

	Mandatory readings	Supplementory reading
Gram-Hansen, S. (2017). Persuasive Designs for Learning, Learning in Persuasive Design, Aalborg Universitetsforlag. Chp 4	4	
Creswell, J. W. (2014). Research Design, Qualitative, Quantitative, and Mixed Methods Approaches (Fourth Edition ed.): SAGE Part I p 1-74	74	