# STUDIEORDNING FOR KANDIDATUDDANNELSEN I INFORMATIONSVIDENSKAB, 2020, KØBENHAVN

## CAND.IT.
## KØBENHAVN

MODULER SOM INDGÅR I STUDIEORDNINGEN

# INDHOLDSFORTEGNELSE

# RESEARCH & METHODS IN INFORMATION STUDIES 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module introduces students to qualitative and quantitative research designs and methods for data collection and analysis in information studies. This includes an introduction to the ethical and legal principles and challenges of data collection and analysis. Students will also be introduced to academic writing conventions and the field of information science, and will be trained in identifying scientific problems, selecting the appropriate research design(s), conducting literature search and review, and formulating appropriate research questions. As such, this module will form the basis of the problem-based project work and inquiries to be carried out during the course of the degree in Information Studies.

## LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- theory of science with special significance for the information science field

- core research paradigms within the field of information science

- quantitative and qualitative research methods

- academic writing conventions within the field of information science

- problem-based and project-based learning, including techniques for identifying and formulating relevant problem statements and research questions

- ethical and legal principles and challenges of data collection, processing, and analysis in information science

### SKILLS

The student must through the module acquire skills in:

- performing literature search and review at an academic level

- adopting academic and scientific writing styles relevant for the field of information science

- planning and executing quantitative and qualitative research studies

- reflecting on the ethical and legal principles and challenges of data collection, processing, and analysis in information science

### COMPETENCES

The student must through the module acquire competences in:

- being able to independently plan, manage and execute a research design, including critical reflection on the appropriate methodological choices

- being able to independently initiate and conduct quantitative and qualitative research studies with regard to real-world problems relevant to the field of information science

- being able to independently develop problem-oriented, interpersonal, structural, and reflective/meta-cognitive learning competences

## TYPE OF INSTRUCTION

Reference to §17.

# EXAM

## EXAMS

| Name of exam | Research & Methods in Information Studies |
|---|---|
| Type of exam | Active participation/continuous evaluation<br>The exam can be passed through satisfactory active participation in the course, including attendance, completion of assignments and participation in exercises.<br><br>Reexamination:<br><br>The exam takes form of a fixed 7-day homework assignment, where the student, based on the module, answers the question(s) and assignment(s) handed out within the module's subject area. The written part of the assignment must not exceed 15 pages and must be prepared individually.<br><br>The assignment is assessed by the examiner alone. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | Passed/Not Passed |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# FACTS ABOUT THE MODULE

| Danish title | Undersøgelsesmetoder i Informationsvidenskab |
|---|---|
| Module code | KAINFOS2015 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Autumn<br>KA 1. semester |

| ECTS | 10 |
|---|---|
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# USER STUDIES AND INFORMATION BEHAVIOUR 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will teach students how to study users and their interaction(s) with information and ICT systems in context. Students will be introduced to different stages of user involvement, as well as data-driven research methods for data collection, processing, analysis, and visualisation in relation to the areas of user research and information behaviour. This includes acquisition and application of knowledge on digital practice, organisational culture, digital culture and cognitive, emotional aspects on the level of individuals, groups and organisations.

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

## LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- user studies in context as well as understanding of user studies and information practices based on the highest international research

- qualitative and quantitative methods for data collection and analysis

- Scientific issues related to user studies and information practices

### SKILLS

The student must through the module acquire skills in:

- being able to evaluate and choose between types of studies and empirical methods from information science in a professionally qualified way in order to design and conduct user studies

- being able to generate design specifications or scientific knowledge based on user studies

- mastering qualitative and quantitative data analysis and methodology for problem solving

### COMPETENCES

The student must through the module acquire competences in:

- being able to independently initiate and conduct user studies and assume professional responsibility towards users and partners

- being able to plan and manage collaborative and research projects that are complex and unpredictable

## TYPE OF INSTRUCTION

Reference to §17.

# EXAM

## EXAMS

| Name of exam | User Studies and Information Behaviour |
|---|---|
| Type of exam | Oral exam based on a project<br>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. 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.<br><br>Literature foundation: Minimum 1000 standard pages supervisor approved, self-selected literature related to the project.<br><br>The project report: the total number of pages must be no less than 10 pages and no more than 15 pages per student in a project group, and 20 pages if written individually.<br><br>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<br><br>At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.<br><br>Any re-examinations will be held on the basis of a revised project report.<br><br>The project report and the conversation must demonstrate that the student furfils the objectives for the module stated above.<br><br>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 insignificant omissions. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

## FACTS ABOUT THE MODULE

| | |
|---|---|
| Danish title | Brugerstudier og informationspraksis |
| Module code | KAINFOS202 |
| Module type | Project |
| Duration | 1 semester |
| Semester | Autumn<br>KA 1. semester |
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| | |
|---|---|
| Study Board | Study Board of Communication and Digital Media |
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# THEORIES & TRADITIONS IN INFORMATION STUDIES 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module introduces students to the central theories and research traditions in the field of information science, including theories on Human-Computer Interaction (HCI), interaction design and information architecture, information seeking, behaviour, and practice, as well as theories on digital collaboration and learning.

## LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- central theories on HCI, interaction design, and information architecture

- central theories on information seeking, behaviour, and practice

- central theories on digital collaboration and learning

### SKILLS

The student must through the module acquire skills in:

- mastering the theories and research traditions in information science

- discussing and comparing the different theories and paradigms of the discipline with a view to formulating appropriate analyses and solutions to real-world problems

- communicating and discussing research-based knowledge and problem statements with peers in multi-disciplinary collaborations

### COMPETENCES

The student must through the module acquire competences in:

- being able to independently initiate and conduct professional and multi-disciplinary collaborations

- being able to independently apply and operationalize relevant theories and traditions from information science in order to solve ICT-related problems

- being able to take responsibility for their own professional development, rooted in an understanding of the discipline's theories and research traditions from a problem-based perspective

## TYPE OF INSTRUCTION

Reference is made to §17.

# EXAM

## EXAMS

| Name of exam | Theories & traditions in Information Studies |
|---|---|
| Type of exam | Written exam<br>The exam takes form of a written homework assignment in which the student answers the question(s) based on a syllabus for the assignment.<br><br>The assignment is prepared individually.<br><br>Total number of pages: The assignment must consist of minimum 12 and maximum 15 pages.<br><br>The assignment is assessed by the examiner and extern examinar. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | External examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# FACTS ABOUT THE MODULE

| Danish title | Teorier og tilgange til informationsvidenskab |
|---|---|
| Module code | KAINFOS2016 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Autumn<br>KA 1. semester |
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

# ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# DESIGN AND DEVELOPMENT OF ICT 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module deals with theories and methods for design and development of ICT systems. It introduces key design approaches, processes and tools and incorporates functional, aesthetic, experiential and learning design principles. The focus is on the interaction between user and technology, as well as deployment including understanding and organisation of social practices, policies and cultures around ICT systems.

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

## LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- design approaches, processes and tools

- evaluation, implementation and deployment of ICT design

- interaction design and information architecture

- design for learning, experience and usability

### SKILLS

The student must through the module acquire skills in:

- critically and constructively to evaluate and select methods for the design, development, implementation and deployment of ICT

- critically and constructively to design and evaluate information architecture and interaction for ICT systems

- analysing and translating empirical data as a basis for decisions regarding design, implementation, evaluation and deployment

- be able to critically assess the role of their designs in society, organisations and in relation ot the individual

### COMPETENCES

The student must through the module acquire competences in:

- assuming professional responsibility for planning and facilitating collaboration with users and customers, and to deal critically and constructively with the formulation of issues and solutions

- translating knowledge into practice, including planning and directing design, development and deployment processes

- critically communicate design specifications through specific models, prototypes or similar manifestations

- independently take responsibility for developing own structural and interpersonal problem- and project-based learning skills

## TYPE OF INSTRUCTION

Reference is made to §17.

# EXAM

## EXAMS

| Name of exam | Design and development of ICT |
|---|---|
| Type of exam | Oral exam based on a project<br>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. 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.<br><br>Literature foundation: Minimum 1250 standard pages supervisor approved, self-selected literature related to the project.<br><br>The project report: 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.<br><br>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.<br><br>At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.<br><br>Any re-examinations will be held on the basis of a revised project report.<br><br>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above. |
| ECTS | 20 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |

| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |
|---|---|

## FACTS ABOUT THE MODULE

| Danish title | Design og udvikling af IKT |
|---|---|
| Module code | KAINFOS205 |
| Module type | Project |
| Duration | 1 semester |
| Semester | Spring<br>KA 2. semester |
| ECTS | 20 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# INFORMATION STUDIES IN PRACTICE

# 2020/2021

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Are stated in appendix 2 in Examination Policies and Procedures.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The theme of the module is the practical reality of information studies. The main component of the module is a minimum 13 weeks (full time) practice oriented work placement, where students collaborate on solving an issue on the basis of Information Studies in a relevant company, organisation or institution. The idea is for students to develop a knowledge and understanding of the concrete work reality that this programme is directed towards. The work practice will be elucidated in a written report on the basis of the theory and methods of the entire study programme.

The module also comprises:

- a halfway seminar

Academic supervision will be offered and the module will be organised as a practice oriented work placement.

### LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- theory and methods of Information Studies 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

The student must through the module acquire 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

The student must through the module aquire competences in:

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

- independently 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 and critically reflect 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 based on a project oriented, problem based learning perspective

## TYPE OF INSTRUCTION

Reference is made to §17.

# EXAM

## EXAMS

| Name of exam | Information Studies in Practice |
|---|---|
| Type of exam | Oral exam based on a project<br>The examination is a conversation between the student(s) and the 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.<br><br>Literature foundation: Minimum 500 standard pages supervisor approved, self-selected literature related to the project.<br><br>The project report: 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.<br><br>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.<br><br>At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.<br><br>Any re-examinations will be held on the basis of a revised project report.<br><br>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above. |
| ECTS | 30 |
| Permitted aids | All written and all electronic aids |
| Assessment | Passed/Not Passed |

| Type of grading | Internal examination |
|---|---|
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# FACTS ABOUT THE MODULE

| Danish title | Informationsvidenskab i praksis |
|---|---|
| Module code | KAINFOS209 |
| Module type | Project |
| Duration | 1 semester |
| Semester | Autumn<br>KA 3. semester<br><br><br>Internship |
| ECTS | 30 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

# ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# THEORETICAL INFORMATION SCIENCE COURSE 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module deals with the theoretical and methodological basis of the field of information science. The main component of the module is a theoretical and methodically oriented course in which the student works independently with a current problem in the field of information science. The intention is that the student develops an awareness of and insight in discussing and communicating a scientific problem. The student's work culminates in a scientific article that places the scientific problem in an subject field, explains the theoretical and methodological framework as well as the academic contribution.

In connection with the module the following is offered:

- a professional seminar focusing on the academic process

A supervisor is assigned to support the process.

The Study Board may, on the basis of a professional assessment, allow the module to be replaced by residency at another university to an extent equivalent to 30 ECTS.

## LEARNING OBJECTIVES

### KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- theory and/or method at the highest international level within the chosen information science topic
- the scientific basis of the chosen topic and the ability to reflect on it

### SKILLS

The student must through the module acquire skills in:

- mastering information science theory and/or method and, on this basis, develop new theory and/or analysis models
- discussing and disseminating information science issues in a scientific article form

### COMPETENCES

The student must through the module acquire competences in:

- independently initiate information science work that requires new solutions
- managing a complex professional development process for own professional specialization
- critically reflecting on the importance of problem-based project work for own professional development

### TYPE OF INSTRUCTION

Reference is made to §17.

## EXAM

### EXAMS

| Name of exam | Theoretical Information Science Course |
|---|---|

| Type of exam | Oral exam based on a project |
|---|---|
| | The examination is a conversation between the student(s) and the examiner and internal examiner based on the handed in article (project), produced individually or in a group. The article will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the article, and one combined grade will be awarded for the written work and the oral performance. |
| | Literature foundation: Minimum 1500 standard pages supervisor approved, self-selected literature related to the article. |
| | The project: total number of pages must be no less than 15 pages and no more than 20 pages per student in a project group. |
| | 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. |
| | 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 and the conversation must demonstrate that the student fulfils the objectives for the module stated above. |
| ECTS | 30 |
| Permitted aids | All written and all electronic aids |
| Assessment | Passed/Not Passed |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

## FACTS ABOUT THE MODULE

| Danish title | Teoretisk forløb inden for Informationsvidenskab |
|---|---|
| Module code | KAINFOS2017 |
| Module type | Project |
| Duration | 1 semester |
| Semester | Autumn<br>KA 3. semester |
| ECTS | 30 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

# ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# MASTER'S THESIS

# 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The Master's thesis module comprises preparation of a Master's thesis on a subject which the student is free to select from within the disciplinary framework of the programme. The thesis may be written as either a theoretically, methodologically or analytically oriented thesis, or it may be oriented towards practical and constructive ICT solutions on the basis of theory and method.

The topic of the Master's thesis must be approved by the Study Board. The topic must be presented to the Study Board in the shape of a thesis statement comprising a preliminary problem formulation, argumentation for the relevance of the topic and for the theoretical and methodological points of departure as well as a preliminary bibliography. Upon approval, a deadline for the submission of the thesis is set.

Students will be offered thesis supervision in relation with their problem oriented thesis work.

LEARNING OBJECTIVES

KNOWLEDGE

The student must through the module gain knowledge and understanding of:

- the theories, methods and technologies of the selected subject area at the highest international level

- research ethics and understanding of the implications of research work

- the theory of science of the selected thesis topic

SKILLS

The student must through the module acquire skills in:

- applying methods, theories and technologies pertaining to a specific issue within the academic area

- creating an independent and systematic overview of relevant existing knowledge within the topic of the thesis

- independently selecting approaches pertaining to the topic of the thesis on the basis of theory of science, theory, methods, analysis, design and/or technology, and substantiating these academic choices and priorities

- applying, further developing and critically reflecting on relevant theories, methods and technologies pertaining to the topic of the thesis

- structuring and communicating the acquired knowledge in a suitable manner as regards content and language register to an academic audience within the disciplinary field of the programme

COMPETENCES

The student must through the module aquire competences in:

- critical reflection on the disciplinary area pertaining to the chosen topic of the thesis

- independent and systematic search for knowledge, choosing and explaining this choice and planning and undertaking the research of the topic of the thesis

- arguing for choices as regards the applied theories, methods and technologies as well as choices as regards any empirical material and/or design aspects

## TYPE OF INSTRUCTION

Reference is made to §17.

# EXAM

## EXAMS

| Name of exam | Master's Thesis |
|---|---|
| Type of exam | Master's thesis/final project<br>The examination will be conducted as a conversation between the student(s) and the examiner and external examiner on the basis of a Master's thesis prepared by one or a number of students.<br><br>The Master's thesis will be considered the shared responsibility of the group. The Master's thesis and the conversation must demonstrate that each student fulfils the objectives for the module stated above as regards knowledge, skills and competences.<br><br>The Master's thesis, including a one-two page summary in a foreign language (see below), forms the basis of the examination and assessment, and a combined grade will be awarded for the Master's thesis and the oral performance.<br><br>Summary: A summary of no less than one page and no more than two pages in Danish or English must be included.<br><br>Literature foundation: Minimum 2000 standard pages supervisor approved, self-selected literature related to the Master Thesis.<br><br>Number of pages: total number of pages of the Master's Thesis must be no less than 35 pages and no more than 70 pages per student in a project group, and 80 pages if written individually.<br><br>Normal duration of examination: 45 minutes; if two students, 75 minutes; and if three students, 100 minutes.<br><br>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above. |
| ECTS | 30 |

| Permitted aids | All written and all electronic aids |
|---|---|
| Assessment | 7-point grading scale |
| Type of grading | External examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

## FACTS ABOUT THE MODULE

| Danish title | Kandidatspeciale |
|---|---|
| Module code | KAINFOS2014 |
| Module type | Project |
| Duration | 1 semester |
| Semester | Spring<br>KA 4. semester |
| ECTS | 30 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# ENVIRONMENT AND RISK COMMUNICATION

# 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

In this module, we work to develop the student's knowledge of communicative conditions and prerequisites in environmental and risk communication in a modern risk and knowledge society. The student is presented with tools for analyzing and possibly dealing with the dissemination of issues related to environment, climate, risks and knowledge in different contexts and with different communication aids. The module enables the student to address scientific issues in environmental, climate and risk communication - including scientific uncertainty and complexity - in both analytical and communicative efforts.

## LEARNING OBJECTIVES

### KNOWLEDGE

Through the module, the student must gain knowledge and understanding of:

- theories, methods and scientific issues within the core areas of environmental, climate and risk communication
- and reflect on the core areas of environmental and risk communication on a scientific basis and be able to identify scientific issues

### SKILLS

The student must through the module acquire skills in:

- being able to evaluate and choose between relevant scientific theories, methods, tools and, on the basis of this, to discuss analytical and/or solution models in environmental and risk communication
- being able to disseminate research-based knowledge and discuss professional and scientific issues with both colleagues and non-specialists

### COMPETENCES

The student must through the module acquire competences for:

- being able to apply relevant theoretical and methodological knowledge to understand and analyze problems in environmental and risk communication
- independently being able to take responsibility for own professional development and specialization in environmental, climate and risk communication

### TYPE OF INSTRUCTION

Reference is made to §17.

## EXAM

### EXAMS

| Name of exam | Environment and risk communication |
| --- | --- |
| Type of exam | Written exam<br>The exam takes form of a given 7-day homework assignment, where the student, based on the module, answers the question(s) within the subject area. The assignment must not exceed 15 pages and must be prepared individually. |

| | The assignment is assessed by the examiner and an internal co-assessor. |
|---|---|
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

## ADDITIONAL INFORMATION

Electives are updated on our website:

https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfag/

## FACTS ABOUT THE MODULE

| Danish title | Miljø- og risikokommunikation |
|---|---|
| Module code | KAKDMVM2023 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Spring<br>KA elective 2. semester |
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# COMPUTATIONAL THINKING – CREATIVE COMPUTING FOR ALL

# 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Computational thinking is about creating, solving problems, designing systems and understanding human behavior, by drawing on fundamental computer science concepts, practices and perspectives. It is about deconstructing complex problems and producing solutions that can be processed by both humans and computers.

In this course, we use block programming as a hands-on approach to learn about key concepts and practices from computational thinking. The course is an opportunity for students to upgrade their basic computer literacy and prepare for a future where we all need to be able to transform our ideas into digital form and evaluate and assess digital creations impact on our academic field.

After this course, you will be able to express your own ideas through block programming; be able to reflect critically on usage of computational solutions and communicate about computational products in interdisciplinary contexts.

Disclaimer: No prior programming experience is needed to attend this course.

### LEARNING OBJECTIVES

### KNOWLEDGE

Through the module, the student must gain knowledge and understanding of:

- theories and methods relevant to computational thinking

- scientific issues related to computational thinking

- ethical aspects of computational thinking

- main terms related to computational thinking

### SKILLS

The student must through the module acquire skills in:

- how to make abstractions of a given problem

- how to decompose complex problems into managable parts

- how to develop algorithms and explain a program

- understanding sensors and how to use them in a program

## COMPETENCES

The student must through the module acquire competences for:

- critically reflect on computing in everyday spaces and analyse/understand/reflect on the impact of computational solutions in a real world context

- independently take responsibility for their own learning, development and specialization within computational thinking

- independently and creatively to work with solving computational issues

## TYPE OF INSTRUCTION

Reference is made to §17

# EXAM

## EXAMS

| Name of exam | Computational thinking – creative computing for all |
|---|---|
| Type of exam | Written exam<br>The exam takes form of a given 7-day homework assignment, where the student, based on the module, answers the question(s) within the subject area. The assignment must not exceed 15 pages and must be prepared individually.<br><br>The assignment is assessed by the examiner and an internal co-assessor. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# ADDITIONAL INFORMATION

Electives are updated on our website:

https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfag/

# FACTS ABOUT THE MODULE

| Danish title | Computational thinking – creative computing for all |
|---|---|
| Module code | KAKDMVM2039 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Spring |

| | KA elective 2. semester |
|---|---|
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

## ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|
| Department | Department of Communication and Psychology |
| Faculty | The Faculty of Humanities |

# DESIGN THINKING: FROM IDEAS TO ACTION 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

"From Ideas to Action" will teach you how to generate creative ideas and bring those ideas into life so others can engage with your vision for the future.

The course takes 'design thinking' as a point of departure. We will both read theory on approaching the world as a designer and engage in actual design processes.

At this course, you will gain insights into and practice three skills aimed at bringing ideas to action:

1. Ideation: We go beyond brainstorming - learn techniques to come up with innovative ideas
2. Rapid Prototyping: Make your ideas tangible, so you can gather feedback from others
3. Iterations: Get results faster by developing your idea so that it meets the right needs, is feasible and viable

The background is theories of design that inform the processes in the course. Throughout the course, the student will undergo a design process reflecting on this, so that the student will later be equipped to manage and facilitate creative processes.

Throughout the course, we work with design challenges that relate to real world issues in groups.

## LEARNING OBJECTIVES

### KNOWLEDGE

Through the module, the student must gain knowledge and understanding of:

- theories and methods of particular relevance for design and design thinking

- scientific issues within design and design thinking

### SKILLS

The student must through the module acquire skills in:

- selecting appropriate scientific methods and tools within the area design and design thinking

- assessing and choosing between appropriate scientific theories, methods and tools and, on this basis, discussing analysis and/or solution models within design and design thinking

### COMPETENCES

The student must through the module acquire competences for:

- independently applying theoretical and methodological knowledge which is relevant for understanding and solving specific issues within design and design thinking

## TYPE OF INSTRUCTION

Reference is made to §17

# EXAM

## EXAMS

| Name of exam | Design Thinking: from ideas to action |
|---|---|
| Type of exam | Written exam<br>The exam takes form of a given 7-day homework assignment, where the student, based on the module, answers the question(s) within the subject area. The assignment must not exceed 15 pages and must be prepared individually.<br><br>The assignment is assessed by the examiner and an internal co-assessor. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# ADDITIONAL INFORMATION

Electives are updated on our website:

https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfag/

# FACTS ABOUT THE MODULE

| Danish title | Designtænkning: fra idéer til handling |
|---|---|
| Module code | KAKDMVM2040 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Spring<br>KA elective 2. semester |
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

# ORGANISATION

| Study Board | Study Board of Communication and Digital Media |
|---|---|

| Department | Department of Communication and Psychology |
|---|---|
| Faculty | The Faculty of Humanities |

| Department | Department of Communication and Psychology |
|---|---|
| Faculty | The Faculty of Humanities |

# INTRODUCTION TO DATA SCIENCE

# 2020/2021

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This module provides students with a basic introduction to data science with the aim of approaching design problems from a data-driven perspective. Students will be introduced to concepts and principles behind relevant data science methods, such as testing research hypotheses, machine learning, analyzing social and textual data, and information access (search, recommendation & personalization). Students are expected to apply this knowledge to data-driven design problems.

## LEARNING OBJECTIVES

### KNOWLEDGE

Through the module, the student must gain knowledge and understanding of:

- relevant data-driven methods for testing research hypotheses

- and understanding of basic principles behind supervised and unsupervised machine learning

- principles behind methods & techniques to derive insights for large amounts of textual data

- and understanding of the basic concepts & principles behind analyzing network data

- principles behind methods & algorithms for information access, such as search, recommendation & personalization

### SKILLS

The student must through the module acquire skills in:

- identifying and using data science methods and techniques with the purpose of informing data-driven design decisions

### COMPETENCES

The student must through the module acquire competences for:

- critically reflect on which data science methods and techniques are most relevant to solve design problems in a data-driven manner

- independently take responsibility for their own learning, development and specialization within data-driven design

## TYPE OF INSTRUCTION

Reference is made to §17

# EXAM

## EXAMS

| | |
|---|---|
| Name of exam | Introduction to Data Science |
| Type of exam | Written exam<br>The exam takes form of a given 7-day homework assignment, where the student, based on the module, answers the question(s) within the subject area. The assignment must not exceed 15 pages and must be prepared individually.<br><br>The assignment is assessed by the examiner and an internal co-assessor. |
| ECTS | 10 |
| Permitted aids | All written and all electronic aids |
| Assessment | 7-point grading scale |
| Type of grading | Internal examination |
| Criteria of assessment | The criteria of assessment are stated in the Examination Policies and Procedures |

# ADDITIONAL INFORMATION

Electives are updated on our website:

https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfag/

# FACTS ABOUT THE MODULE

| | |
|---|---|
| Danish title | Introduktion til datavidenskab |
| Module code | KAKDMVM2042 |
| Module type | Course |
| Duration | 1 semester |
| Semester | Spring<br>KA elective 2. semester |
| ECTS | 10 |
| Language of instruction | English |
| Location of the lecture | Campus Copenhagen |
| Responsible for the module | Ole Ertløv Hansen |

# ORGANISATION

| | |
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| Study Board | Study Board of Communication and Digital Media |
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