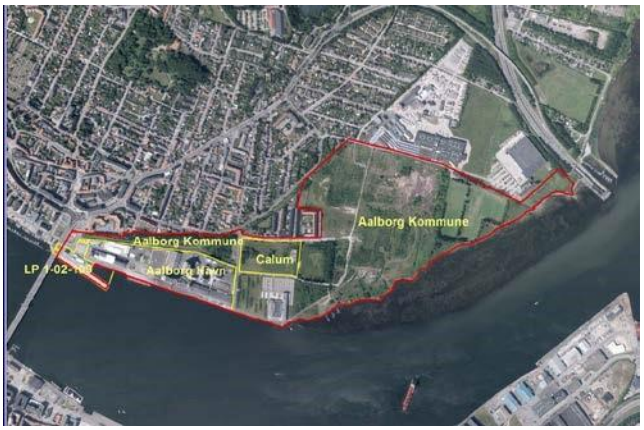
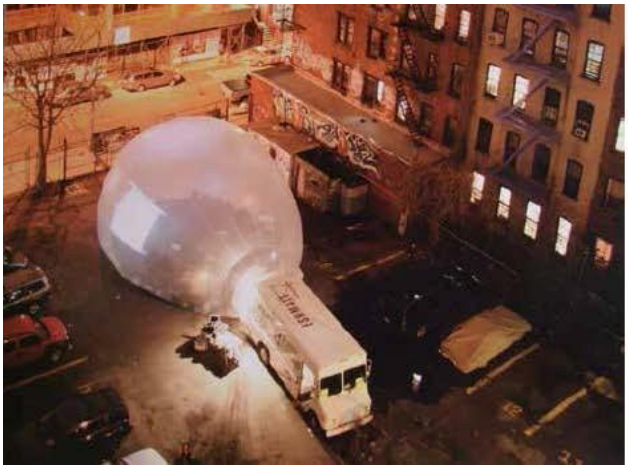
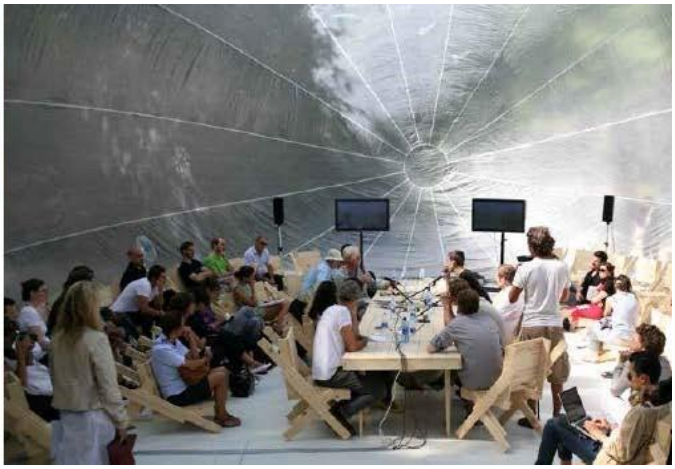
AALBORG UNIVERSITET

Art & Technology 4th Semester 2016

Place and Space of Embodied Interaction: a site in transition







Semester description

Semester details:

School: Communication, Art and Technology (CAT)

Study board: Art & Technology

Study regulations: BA Study Program in Art and Technology, Sept, 2016

Semester framework theme

Place and Space of Embodied Interaction: a site in transition: We will address an actual opportunity for development in Aalborg this semester, working with the public-urban environment of Stigsborg Havnenfront http://stigsborghavnefront.dk. See Moodle for more information.

Edited from Architecture and Urban Development negotiations with Kommune.

'As an ambiguous umbrella term Smart City deals with finding solutions for the grand challenges, such as sustainability, climate change, resource scarcity, energy security, inequality, civic involvement and participation etc. in an increasingly urbanised world. Politicians, government officials, policy makers, technologists and international corporations as well as citizens, NGOs and entrepreneurs, have primarily advanced the notion of Smart City. However, to a less degree Smart City has been on the agenda for professionals involved in the city making such as urban designers, architects, artists and planners. In this module we invite the students to think of Smart City, not only as a way of rationalising and optimising the city and its complex processes, but also as a way of creating more attractive, liveable, aesthetic, inspiring and resilient cities and urban environments for its inhabitants and their social, mental, physical and spiritual well-being.*, Simon Wind, 2015.

The objective of this semester and the greater project itself, is to gain a deeper understanding of how artists, technologies and developments in cities (and all the people that pull these together) can work together to create better urban environments. There will be many agendas, for example, some will have emphasis on novel sensor and tracking technologies, others on interactive media and responsive environments, also mobile and digital network technologies. All these fall under the heading of Smart City to advance the creation of functional, attractive and responsive urban spaces as important and meaningful places in peoples everyday lives. Students will be introduced to the case of Stigsborg Habourfront in Aalborg and begin to think ideas of what they can add to the environment for the initial temporary influx of sports people and for longer term use of the urban environment solutions.

The students are tasked with developing designs that can accommodate temporary activities and facilitate leisure and social interaction to be deployed for a large sporting event in 2017 at selected sites in the Stigsborg Habourfront area. There will be a population influx of 20-25,000 people housed on the site. The housing and general facilities will be taken care of but the entertainment and relaxation facilities need addressing and this is where ArT4 (and Architecture and Urban Design) students come in.

On the front page you can see the very preliminary layout of tents for the DGI event in 2017.Each square is approx. 500m2 and is about 20-22 individual tents. Around the perimeter there will be "watchtowers" for fire hazard. You will have information sessions with the Kommune organisers and developers of other harbour front area so you get an overview of the whole project. Also we will work with the 4-5 sub-sites that are delegated for the students to work within.

Each group must work in close communication with their supervisor and the site, with the idea to exhibit a poster of the intended design and a prototype version of the intended interactive installation/environment (at Rendsburggade 14, 9000 Aalborg). Your poster will also be put into the larger pool of posters with Architecture and Urban design students with an opportunity be selected by Kommune and a larger panel to be built for summer, 2017 (they will have engineers etc. to build the real thing). We will need to work closely with stakeholders and other invested parties in the urban environment and address the theme of places (the site), embodied interaction combined with an interactive technologies focus. In addition, addressing a community of local stakeholders and the intended temporary population, students have

potential to develop relationships with a more permanent set of authorities that can potentially support their work post-degree. Long term the site will be developed for permanent urban use, so there is also potential for design ideas to impact there.

All courses in the semester will support the project and semester theme. All learning stems from work undertaken in prior courses, supports future course work, fits within the larger program overview and extends the students to begin work with stakeholders and potential future work environments.

Semester organisation and time schedule

Structure

This semester contains 3 modules

Module 12: “Place and Space of Embodied Interaction: a site in transition” (20 ECTS)

Module 13: “Art in Context II - Media Art Theory ” (5 ECTS)

Module 14: “International Collaboration” (5 ECTS) (Module 14 is a solo module for 4th semester).

Content

The 3 modules will focus on addressing semester themes of interactivity and public-urban spaces. The content from the modules support the semester theme and projects.

For more detailed information about the content of the three modules on this semester, please see the relevant sections later in this guide.

All dates should be cross-checked with Moodle, which will hold the current version (in case of latechanges).

Semester coordinator: Ann Morrison, morrison@create.aau.dk, 9940 7452

Secretariat assistance: Anne Nielsen, amn@hum.aau.dk, 9940 9919

Place and Space of Embodied Interaction:

- Ann Morrison, morrison@create.aau.dk, 9940 7452
- Markus Löchtefeld
- Line Marie Bruun

Art in Context II - Media Art Theory and Media Art Theory & Analysis,

- Elizabeth Anne Jochum

International Collaboration

- Palle Dahlstedt

Artistic and Academic Methodology IV (Interaction Design)

- Ann Morrison, morrison@create.aau.dk, 9940 7452

Aesthetics and Interaction

- Markus Löchtefeld

Interactive Technologies

- Markus Löchtefeld

Digital Representation II-CAD and Spatial Animation

- Peter Skotte

Module 12 - Place and Space of Interaction (15 ECTS project)+(5 ECTS courses) – 20 ECTS (HSA440023H)

Location: 4th semester

Module coordinator

Ann Morrison

Supervisors: Markus Löchtefeld, Line Marie Bruun and Ann Morrison

Type and language

Project module with support courses, Project work in groups

Language of instruction: English

Objectives

This semester, students will divide themselves into groups of four to five students and each group will work on a single project with the goal of creating an interactive art installation and/or performance to be included in an exhibition to be held for 2 evenings in Rendsburggade 14, 9000 Aalborg, and the main content will address the site Stigsborg Havnenfront.

This exhibition will be called “Place and Space of Embodied Interaction: a site in transition”. Each project group will be required to focus on interactive element(s), the experience for the audience and the specificity of the urban (public) site (and its temporary and/or future use) as essential elements of their, interactive installation that promotes, provokes, stand in opposition to, symbolises or represents in some form a space of interaction and transformation. This semester we will exhibit in week 20 (Thursday and Friday, 19 & 20.05.2016) (please check for any date changes in Moodle calendar. Where there are conflicting dates Moodle calendar will be assumed to be the latest corrected version).

Students must work closely with supervisors and the nature of (and the stakeholders of) the public site in order to ensure that their installation is approvable for being set up at the site (for example, in a public space safety issues must be considered).

Note that approval for installation and inclusion in the Place and Space of Interaction exhibition is a requirement for passing this semester.

The objective of module 5: “Place and Space of Embodied Interaction” is to introduce the students to problem areas and designing solutions in relation to embodied interaction in interactive space, places and installations.

During this module, students should acquire:

basic knowledge about

creation of interactive spaces and installations that encourage embodied activity and an understanding of the situated locale

cybernetic technologies that support active participation

mechanical and electronic technologies for the creation of experience and interaction

methods and tools for the processing of auditive, tactile and visual information for the support of active interaction by participants within the installation

skills in

identifying and formulating an art problem within the theme “Place and Space of Embodied Interaction” possibly including cooperation with external user groups

analyzing the problem and developing alternative concepts for a defined problem within a defined context

the application of audio and other technologies in connection with the design of content for interactive installations and spaces

identifying, developing and describing the interaction between audio and spatial effects, choice of materials and technological solutions with a view to achieving clear aesthetic expressions and motivating embodied performance

selecting appropriate methods in connection with the development of artefacts competencies in

the creation of interactive spaces and installations with an artistic quality in terms of architecture, interaction patterns, and soundscapes

architectural and artistic methodology, including interaction between technology, choice of materials and aesthetic expressions

the use of interactive technologies, including control of media, light and sound

contextualising own artistic solutions (to state-of-art, socio-cultural requisites and consequences, art theoretical and aesthetic dimensions, etc.)

describing the completed design at a professional level, and communicating this to external cooperation partners

identifying own learning needs and to structure own learning related to the theme of the module

Academic content and conjunction with other modules/semesters

Module contents: The module will be conducted as a series of experiments with interactive installations in a particular architectural context. This may be an urban place or stage, architectural setting, a community environment, an exhibition space, etc., (see this year’s theme to specifically address this) where artistic installations are created and tested in relation to providing participant experiences of various kinds (such as the orchestration of social relations, learning experiences, sensory and aesthetic experiences, actionreaction patterns, etc.) In this regard, modalities such as architectural constructs, spatial atmospheres, sound, image, various interactive technologies, and embedded intelligence systems are investigated and applied. The work builds on avenues explored in prior semesters, adding addressing architecture and audio as concerns within the work process, and leads into further work explored in future semesters.

Courses:

In connection with the module, courses may be offered within the following areas:

Artistic and Academic Methodology IV (Interaction Design)

Interactive Technologies

Digital Representation II-CAD and Spatial Animation

Aesthetics and Interaction

Scope and expected performance

The expected scope of the module in terms of ECTS load. This comprises number of teaching hours, exercises, preparation time, travel activity (if applicable) etc.

Total workload: 20 ECTS = 550 hours

15 ECTS project work =412,5 hours

5 ECTS courses=137,5 hours

Digital Representation II 2 ECTS=55 hours

Teaching hours 8x2x45min=24hours Work shop activities Preparation Interaction Design AAM 1 ECTS =27,5 hours Teaching hours 4x2x45min=12 hours Work shop activities Preparation Interactive Technologies 1 ECTS =27,5 hours Teaching hours 4x2x45min=12 hours Work shop activities Preparation Aesthetics and Interaction 1 ECTS =27,5 hours Teaching hours 4x2x45min=12 hours Work shop activities Preparation
Participants ArT4
Prerequisites for participation Passing prior semester load or equivalence.

Artistic and Academic Methodology IV (Interaction Design) 1 ECTS

Lecturer(s): Ann Morrison

Purpose and goals: A goal for artists working with technology is to integrate Interaction Design principles into their interactive installations and artefacts. That is, to strive to create meaningful

relationships between the people who interact with the interactive systems that operate at the heart of the environments that are created. Interaction Design is useful for artists to develop a richer understanding of the experience for their participants and to improve the interactive systems they design and implement.

Literature: Fieldwork for Design: Theory and Practice by David Randall Richard Harper and Mark Rouncefield. Slides and other resources will be made available on moodle.

Assessment: Students will do practical exercises on the methods presented in the lecture in class. Documents produced for this course may be included as part of the final report, but need to be identified as content from this course.

Session 1: Identify design, artistic, and interaction design goals.

Lecture and workshop

Lecturer: Ann Morrison

Content: Identification of the design problem(s) addressed in the project. Identification of the artistic goals that are the focus of the 'work' proposed for this space. Identification and unpacking of the kinds of interactions the proposed work will effect for the participants.

Assignments: As above. Each group will work on identifying design problems, artistic goals and the intended interaction design for their project.

Literature: Chapters 2, Fieldwork for Design: Theory and Practice by David Randall Richard Harper and Mark Rouncefield.

Session 2: Observation methods.

Lecture and workshop

Lecturer: Ann Morrison

Content: Methods: Note-taking, photographs and/or videos. Focus and observation in situ without disrupting 'natural' behaviour of the space. Design open-ended interviews and questionnaires. Identify artistic and design focus for observation.

Assignments: As above. Discuss and identify the priorities and focus of observations for your own project. Design and develop methods to use for sessions 3 & 4.

Hand in work from Sessions 1 and 2 for comment and feedback, in preparation for implementation in sessions 3&4.

Literature: Chapters 2, Fieldwork for Design: Theory and Practice by David Randall Richard Harper and Mark Rouncefield.

Session 3: Ethnography: Study of stakeholders in situ I.

Workshop at exhibition site

Lecturer: Ann Morrison

Content: Set up a low/fi life size version of the intended installation at the site. Each group acts as participants in each others work. Observation of the groups and individuals as they naturally move, interact in and use the space by project groups; observation by taking notes, photographs and/or videos.
Assignments: Integrate observations and analysis of data collected into project work

Literature: Chapter 6. Ethnography and How to Do It, Fieldwork for Design: Theory and Practice by David Randall Richard Harper and Mark Rouncefield.

Session 4: Ethnography: Study of stakeholders in situ II

Workshop at exhibition site

Lecturer: Ann Morrison

Content: Discuss findings in groups and narrow in on emergent findings. Critically reflect on own and other groups work. Continue with more honed observation focus. Identify interactions that occur naturally and fine-tune your own project from findings this day and from prolonged site observation.

Assignments: Integrate observations and analysis of data collected into project work.

Literature: Chapter 6. Ethnography and How to Do It, Fieldwork for Design: Theory and Practice by David Randall Richard Harper and Mark Rouncefield.

Digital representation II (CAD II - spatial animation) 2 ECTS

Lecturers: Peter Skotte

Purpose and goals:

Students will get a basic to intermediate knowledge in simple design and animation principles through hands-on exercises. Learn how to model simple 3D scenes to assist in making up a virtual design of their own installations. Learn how to animate these and add “life” to the 3D scene and replicate intended interaction.

Assessment

Satisfactory completion of assignments given during the course. These assignments should be submitted to the course-leader. The collected assignments will be evaluated by the course-leader and the student will be awarded either a pass or a fail for the course. Students are required to present their final work in the final class session and be prepared to present their ongoing work throughout the course sessions.

Title 1-8: CAD 2 – Spatial Animation.

Lecturer: Peter Skotte

Content:

CAD2-1 – Installing and exploring 3D software (Maya)

http://www.autodesk.com/education/home

Getting familiar with the Maya interface

Setup a project.

Maya workflow

CAD2-2 – Modeling 1

Polygons, edges and verticies vs NURBS

Creating polygonal objects

Selecting polygonal components

Box modeling. Soft selection, Reflection

Boolean operations

CAD2-3 – Modeling 2

Extrude

Bevel

Edge loops

Mirroring

Using paths

Bridge tool

CAD2-4 – Materials and textures

Applying materials

Texture projection

Basic UV mapping

Multiple materials

CAD2-5 – Animation 1

Animation interface

Animating using set key

Modifying keys

Animation cycles

CAD2-6 – Animation 2

Path animation

Breakdown keys

Set driven key - Expressions CAD2-7 – Lights

Light types

Basic light setup

Shadow types

CAD2-8 – Rendering / Output

Cameras

Raytracing

Image based rendering

Render setup

Output to file

CAD2-9 – Q & A session

Assignments:

Using (program to be determined on students competency) to setup both simple exterior models, as well as complex sets, build a simple geometry virtual model of your intended installation. Add animation layers of the intended interaction. Students will do practical exercises on the methods presented in the lecture.

Literature: Maya Online help centre: www.autodesk.com/maya-help-2016-enu

The Art of 3D Computer Animation & Effects, Fourth Edition - Isaac Kerlow
http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0470084901,subjectCd-CSC0.html ISBN: 978-0-470-08490-8

Interactive Technologies (1 ECTS)

Responsible Coordinator: Ann Morrison

Lecturer: Markus Löchtefeld

Purpose and Goals: This course will address building interactive systems for active and embodied spatial interaction. It will also address using technology outside of the laboratory, what we need to consider when using technology out in the real world and how can we implement it in a meaningful way.

The course will survey a variety of technologies, which can be applied in the context of the semester

project.

Lecture 1 – Tangible User Interfaces

Markus Löchtefeld

Tangible User Interfaces (TUIs) allow for effective and easy interaction with digital information by encapsulating them into a physical form. We will learn from examples how to create and evaluate TUIs.

We will discuss different technologies and prototyping materials to easily develop TUIs.

Assignment(s):

We will have exercises from material covered that are required to be completed in class and/or before next session.

Literature:

Ishii, H., Lakatos, D., Bonanni, L., & Labrune, J. B. (2012). Radical atoms: beyond tangible bits, toward transformable materials. interactions, 19(1), 38-51.

Wiethoff, A., Schneider, H., Rohs, M., Butz, A., & Greenberg, S. (2012, February). Sketch-a-TUI: low cost prototyping of tangible interactions using cardboard and conductive ink. In Proceedings of the Sixth International Conference on Tangible, Embedded and Embodied Interaction (pp. 309-312). ACM.

Lecture 2 – Gestural Interaction

Markus Löchtefeld

Gestural Interaction will cover a variety of sensing technologies and detection algorithms that allow for mobile as well as public interaction through gestures. We will explore possible use-cases based on the theme of the semester project. The lecture will include an exercise in gestural sensing based on available sensors (e.g. Kinect and smartphone sensors).

Assignment(s):

Exercises from material covered that are required to be completed in class and/or before next session Literature:

Billinghurst, Marc, and Bill Buxton. "Gesture based interaction." Haptic input 24 (2011).

Valdes, C., Eastman, D., Grote, C., Thatte, S., Shaer, O., Mazalek, A., & Konkel, M. K. (2014, April).

Exploring the design space of gestural interaction with active tokens through user-defined gestures. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 4107-4116). ACM.

Lecture 3 – Biosensing

Markus Löchtefeld

Biosensing will cover different ways of measuring biosignals from living beings, such as galvanic skin responses, heartbeat, EMG, EEG, etc. The lecture will also contain exercises in creating a biosensing artefact, based on available sensors Assignment(s):

Exercises from material covered that are required to be completed in class and/or before next session Literature:

Sean M. Montgomery and Ira M. Laefsky, Biosensing in MAKE Volume 26, 2011

Lecture 4 – Project Specific Problems and Examples

Markus Löchtefeld

In this lecture we will look at examples of previous work in the field and analyse their design, also the groups semester projects will be presented and any technical issues can be discussed. Especially we will cover different ways making sure the technology we work with will perform as expected outside the laboratory. This will cover safety, ingress protection, weather proofing and power supply considerations Assignment(s):

Exercises from material covered that are required to be completed in class and/or before next session.

Literature:

ANSI/IEC 60529

Make: Electronics

Aesthetics and Interaction (1 ECTS)

Responsible Coordinator: Ann Morrison

Lecturer: Markus Löchtefeld

Purpose and goals:

In this course we will discuss different approaches for novel interactions in public places with the hidden data-layer of smart cities. These will include crowd engagement through public displays and media facades. Furthermore we will look into the exploitation of geographical information to create more informed decisions for spatial experiences.

Assessment: Assessment will be based on a presentation of the final group Lecture 1: Urban Interaction

Lecture 1:

Markus Löchtefeld

With the recent push towards smart cities not only a variety of new data about the city and its inhabitants will be available, but also new interaction possibilities will emerge. We will discuss and explore novel sensors and actuators for smart cities and how they can be utilized to enable smart civics to become an active part in the city life.

Assignments:

We will have exercises from material covered that are required to be completed in class and/or before next session.

Literature:

Townsend, A. M. (2013). Smart cities: big data, civic hackers, and the quest for a new utopia. WW Norton & Company.

Brynskov, M., Carvajal Bermúdez, J. C., Fernández, M., Korsgaard, H., Mulder, I. J., Piskorek, K., & De Waal, M. (2014). Urban Interaction Design: Towards City Making.

Lecture 2: GeoHCI

Markus Löchtefeld

The increasing popularity of social computing as well as the number of ubiquitous GPS enabled devices gave a rise to the importance of geography for human computer interaction. We now, either explicitly or implicitly, track, store capture, and annotate our surroundings constantly through out the day. In this course we will have an introduction to foundational literature, modern geography, as well as, the qualitative and quantitative research practices that are most relevant.

Assignments:

We will have exercises from material covered that are required to be completed in class and/or before next session.

Literature:

Goodchild, M. F., Fu, P., & Rich, P. (2007). Sharing geographic information: an assessment of the Geospatial One-Stop. Annals of the Association of American Geographers, 97(2), 250-266.

De Smith, M. J., Goodchild, M. F., & Longley, P. (2007). Geospatial analysis: a comprehensive guide to principles, techniques and software tools. Troubador Publishing Ltd.

Lecture 3: Pervasive Public Displays

Markus Löchtefeld

In this course we will discuss opportunities and challenges raised by the emergence of pervasive display systems as a new communication medium for public and semi-public spaces. Besides technological challenges we will explore how to engage passers-by into meaningful interactions with public displays.

Assignments:

We will have exercises from material covered that are required to be completed in class and/or before next session.

Literature:

Müller, J., Alt, F., Michelis, D., & Schmidt, A. (2010, October). Requirements and design space for interactive public displays. In Proceedings of the international conference on Multimedia (pp. 1285-1294). ACM.

Alt, F., Schneegaß, S., Schmidt, A., Müller, J., & Memarovic, N. (2012, June). How to evaluate public displays. In Proceedings of the 2012 International Symposium on Pervasive Displays (p. 17). ACM.

Müller, J., Walter, R., Bailly, G., Nischt, M., & Alt, F. (2012, May). Looking glass: a field study on noticing interactivity of a shop window. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 297-306). ACM.

Lecture 4: Media Facades

Markus Löchtefeld

Media facades are a special category of public displays and a prominent example of the digital augmentation of urban spaces. They denote the concept of turning the surface of a building into a largescale urban screen. Due to their enormous size and the highly dynamic urban environment around them, they require special interaction techniques. In this course we will establish the foundation for the design for such urban interactions as well as how to prototype and create ad-hoc media facades.

Assignments:

We will have exercises from material covered that are required to be completed in class and/or before next session.

Literature:

Behrens, Moritz, and Duncan P. Brumby. "Designing Media Architectural Interfaces for Interactions in Urban Spaces." Citizen's Right to the Digital City. Springer Singapore, 2015. 55-77.

Gehring, Sven, and Alexander Wiethoff. "Interaction with media façades."Informatik-Spektrum 37.5 (2014): 474-482.

Examination Module 12

The module is completed with: Student project in exhibition (the product), a written report and oral examination. Examination 12

An external combined written and oral examination in Module 12 “Place and Space of Embodied Interaction”.

The examination will take the form of a conversation between the student, the examiner and an external examiner on the basis of the project report prepared by the student(s), which may be in the form of a report or portfolio as well as the product created by the student. The project exam will also address other content from the module courses.

Form of examination: b)

Number of pages: the written work must not exceed 10 pages per student (15 pages in the case of individual reports).

Duration of examination: 20 minutes per student and 10 minutes for assessment and communication of grades per group, however, the duration of the examination is maximum 2 hours.

Evaluation: Grading according to the 7-point scale.

Proportional weighting: An overall equal evaluation is made of the project report, the product, and the oral performance.

Credits: 20 ECTS

The written report, the product and the oral examination should demonstrate that the student has fulfilled the objectives outlined above.

Module 13: “Art in Context II - Media Art Theory ” (5 ECTS) (HSA440024D)

Location

2nd and 4th semester

Module coordinator

Elizabeth Ann Jochum

Type and language

Method of working: Individual work in relation to course activities

Language of instruction: English

Objectives

This course serves as a general introduction to art and technology as a theoretical field of study. As such it continues the trajectory of Art in Context 1, however this semester with a focus on media art before and after the 'digital revolution'. Whereas the theories and humanistic themes of perception, hermeneutics, phenomenology, systems, imagination, and beauty introduced in AiC 1 are still very relevant for the study of art they tend to be challenged and criticized when technology, science and media enters the scene. From this, different theoretical and artistic practices emerge that not only circulate ideas about technology, science and media into critical thinking but also take up new paths of investigations and methods.

The course is structured around eight interconnected lectures focused on giving the students an introduction to different seminal theories, practices and ideas accompanying the still more intensive relationship between art, technology, media and science in the 20th and 21st Century – in short, here, termed Media Art.

Learning objectives:

During this module, students should acquire:

Basic **knowledge** about

- media art theories and concepts with special focus on cross-disciplinarity and synergy between art and media technology
- various methods of analysis of media art product and projects in regard to their cultural, personal, aesthetic and epistemological significance
- audience and user concepts of media art and the related behavioral and aesthetic preferences

Skills in

- using and applying basic theories and methods in regard to analyses of media art works
- describing artistic challenges and aesthetic formats of media art
- identifying target groups and their behavior and aesthetic preferences in relation to experience potentials of media art works

Competencies in

- applying theories and methodologies of media art
- analyzing and discussing media art works as cultural and aesthetic phenomena
- applying knowledge about user groups and user behavior in analysis and concept design of media art works

Academic content and conjunction with other modules/semesters

Module contents: The module "Art in Context II" examines media art works and their cultural, aesthetic, social, and technological positions in the 20th and 21st centuries. Students learn about relevant theoretical perspectives on media art. They learn to apply those theories in analysis of media art works. They will also investigate varying audience and user concepts of different instantiations of media art.

The module will consist of lectures, workshops and seminars.

Scope and expected performance

The expected scope of the module in terms of ECTS load. This comprises number of teaching hours, exercises, preparation time, travel activity (if applicable) etc.

Participants

ArT4

Prerequisites for participation

Courses:

In connection with the module, courses may be offered within the following area:

- Media Art Theory & Analysis

Required Texts:

The New Media Reader (2003) Ed. Noah Wardrip-Fruin, Nick Montfort MIT Press

Other readings from Between the Humanities and the Digital (2015) Ed. Patrik Svensson and David Theo Goldberg. MIT Press

Recommended:

Remediation by Jay Bolter and Richard Grusin (1999) MIT Press (pdf)

*Entangled by Chris Salter (2010) MIT Press

* available at FACTUM bookstore on Strandvejen

Lesson 1: Foundations of Media Art Theory

Lecturer: Elizabeth Jochum

March 29 10:15-12 Content:

What is media art theory? This course will give the student and overview of the most important theories within the expanding field of media art. In this introductory lecture some basic concepts and theoretical problems in the media art field that also resonate in Walter Benjamin's seminal text about art in the age of technological reproduction: Authenticity, the subject of technology, and mediated (social) experience. And within this overall new direction of the modern culture, the lecture will also be looking at what aesthetic paradigms are at play in media art.

Assignments: In-course assignments

Required Readings:

"The Work of Art in age of Mechanical Reproduction" (Walter Benjamin) (pdf)

"The Work of Art in the Age of Digital Reproduction (Douglas Davis) (pdf)

Lesson 2: The Global Village: electronic interdependence, communication technologies, and social organisation

Lecturer: Elizabeth Jochum

March 29th 13:15-15

Content:: Marshall McLuhan described the shift from book-culture to electronic media, and his theories are the foundations of media art theory that seek to describe the transition from analog to digital media, and the impact of this transition on the art world, culture, and society at large. In particular, McLuhan articulates how digital media have transformed relationships and social organisations in culture and society. Building on the students' prior familiarity with McLuhan (the movement from age of typography to the age of television), we look at the personal sand social consequences of new media and technological tools, investigating McLuhan's assertion that "the clearest way to see through a culture is to attend to its tools for conversation."

Assignments: In-course assignments

Required Readings:

The Medium is the Message (excerpt) (pdf)

The Global Village: Transformations in World Life and Media in the 21st Century (1989)

Lesson 3: Contemporary Media Theory

Lecturer: Elizabeth Jochum

March 30 10:15-12

Content:: New media technologies are central to contemporary social life, and emergent technologies and media are being developed for a generation that has grown up with the Internet and accelerated development of electronic technologies. Just as television was a mobilizing force,

Assignments: In-course assignments

Required Readings:

Constituents of a Theory of the Media (Hans Magnus Ensensberger) (pdf)

The Technology and the Society (Raymond Williams) (pdf)

Lesson 4: Mapping Media Theory and Discourse: From Television to Web 2,0 and the Internet of Things

Lecturer: Elizabeth Jochum

March 30 13:15-15

Content:: An introduction to the concept, practice, theory, condition and (short) genealogy of New Media Art with a focus on Lev Manovich's The Language of New Media (1999) and the Internet of Things. We focus on issues of data, connectivity, and user generated content in media art theory.

Assignments: Mapping Media Theory and Discourse, Student presentations

Required Reading:

Lev Manovich (1999), The Language of New Media, MIT Press. Pp.43-75 (pdf)

Sue Halpern (2014) "The Creepy New Wave of the Internet" (New York Review of Books) http://www.nybooks.com/articles/2014/11/20/creepy-new-wave-internet/

Lesson 5: Responsive and Interactive Environments

Lecturer: Elizabeth Jochum

April 1 10:15-12

Content:: The concept of interaction in media art has developed beyond a purely technological paradigm. What are the principles of interaction and interactive art? How do these principles manifest in public art and public spaces? This lesson looks at the history of interactive art with a focus on first and second generations responsive environments, systems aesthetics, and performative interfaces and spaces created by media artists. Generated by the concept and devices, inter

Assignments: In class presentations

Required Readings:

Responsive Environments by Myron W. Kruger (pdf) Entangled by Chris Salter Ch. 8 "Interaction" (pdf)

Lesson 6: Sound, Interaction and Culture

Lecturer: Elizabeth Jochum

April 1 13:15-15h

Content: This lecture introduces the principles of sound art, sonic environments and electroacoustic composition. The emphasis is on elucidating the underlying themes and theories of the new sound art, and how these art works interface with topics of interaction, culture, and media art theory.

Assignments: In class presentations

Required Reading:

Schafer, R. M. (1994). The soundscape: Our sonic environment and the tuning of the world. Rochester Vt: Destiny Books.

Harris, Yolande (2015) "Scorescapes: On sound, environment and Sonic Consciousness" (Leonardo) (pdf) Suggested Reading:

Crossing Listening Paths. 2011. Soundscape: The Journal of Acoustic Ecology 11 (1). http://wfae.proscenia.net/journal/scape_16.pdf.

Truax, B. (2001). Acoustic communication 2nd ed. Westport, Conn: Ablex. World soundscape project. n.d. Retrieved December 8, 2014, from http://www.sfu.ca/~truax/wsp.html

Voegelin, S. 2013. Sonic Possible Worlds. In Leonardo Music Journal

(Special Issue on Sound Art). http://salomevoegelin.net/public_html/salomevoegelin.net/sonic_possible_world.html

Lesson 7: Interactive Media, Culture and Society

Lecturer: Elizabeth Jochum

April 4 10:15-12

Content: Interactive technologies used in art contexts and public environments raise critical questions about what constitutes meaningful aesthetic experiences. Locative media transform notions of space, place and performance, asking us to rethink the relationships between art objects, society, culture, and makers. This lesson looks at contemporary examples of art works and development on media art theory in light it locative media and computer-based interactive art in public spaces.

Assignments: In-class student presentations

Required Readings

"Meaningful Engagement: Computer-Based Interactive Media Art in Public Space by Jiun-Jhy Her and Jim

Hamlyn (pdf)

"Locating the Mobile and the Social" A preliminary discussion of Camera Phones and locative media by Larissa Hjorth (pdf)

Recommended reading:

Min Chen, Shiwen Mao, Yunhao Liu (2014) Big Data: A Survey , Mobile Networks and Applications, 19(2), pp 171-209

Ambient interaction and situational influence: case studies in public sites

Her, Jiun-Jhy ; Hamlyn, Jim. Digital Creativity, 16 June 2015, p.1-18 (pdf)

Lesson 8: Media Art in Context: Imran Qureshi

Lecturer: Elizabeth Jochum

April 4 13:15-15

Assignments: In-class student presentations

Content: Imran Qureshi is a Pakistani artist from Lahore, Pakistan who works across a variety of media. He has participated in many exhibitions worldwide and in 2013 he named the Deutsche Bank's "Artist of the Year." Renowned for his rooftop installation of 2013 at the Metropolitan Museum of Art in New York, Qureshi also participated in the Nuit Blanche in Paris in 2014 with an installation at the Bibliothèque Sainte-Geneviève and on the Quai d'Austerlitz. He participated in the 2013 Venice Biennale in the main show, The Encyclopedic Palace, and his work was shown at the 56th Venice Biennale in The Great Game held in the Iranian Pavilion. In 2016 he has an exhibition at the Barbican in London and will have a show for the reopening of the new exhibition space at Kunsten in Aalborg. Qureshi is represented in the permanent collections of The Metropolitan Museum of Art, New York and the Victoria & Albert Museum, London. Qureshi's approach combines the motifs, symbolism, and ornamental techniques of Mughal miniature painting with contemporary conceptual approaches. He works in a variety of mediums, including printed monographs, paintings, works on paper, and video.

Required Readings:

Imran Qureshi: Idea of Landscape http://images.dawn.com/news/1174072

Interview with Imran Qureashi (Apollo)

http://www.apollo-magazine.com/imran-qureshi-november-apollo/

Required Viewing:

https://www.youtube.com/watch?v=8aoEfZruLO0 https://www.youtube.com/watch?v=PT1j0fURp8o
http://www.ok-rm.co.uk/project/side-by-side

REQUIRED FIELD TRIP: Wednesday April 6 from 15h-16:30

Public talk with curator of "Traces of Blood" and attendance at exhibition at Kunsten

IN-CLASS ASSIGNMENTS:

Groups of 4 students (max)

Students groups will present an artwork, chosen from a list or database presented in class, in the context of one of the essays/course readings. All works will be chosen at the end of the Lesson 2, to ensure that no artist or work is covered twice. Students may choose to work in groups across-semesters.

The focus of these presentations should NOT be the artwork, but rather the course

LITERATURE/READINGS and the principles of media art theory. The art work should only serve as an EXAMPLE that illustrates the issues, themes, and concepts articulated in the theory or essay.

Presentation may include some biographical material on the author, but this should not be the emphasis of the presentation.

Presentation: 3 slides (max) (video/sound clips limited to 1 minute), 10 minutes total for presentation. Each group must deliver a 1-page handout for the class. I will demonstrate what a handout and presentation should look like on Lesson 1.

Examination

The module Art in Context 2 includes a one week writing period from outstet of examination question(s). See study guide for further detail!

Examination 13

An internal written examination in **Module 13: "Art in Context II – Media Art Theory"**

Form of examination: c)

The examination is a 7-day assignment on a set subject. The examiner and an additional internal examiner according to 7-point scale evaluate the assignment.

Number of pages: the written work must not exceed 10 pages.

Credits: 5 ECTS

The examination should demonstrate that the student has fulfilled the objectives outlined above.

TOPIC:

2nd SEMESTER

Explore the media art database at http://www.rhizome.org/ and the artists at http://www.furtherfield.org/ and choose one work of new media art for analysis in the context of the course readings and discussion.

How has the artist used interactivity and the user interface to enhance the viewer's experience? What is this art work about about? What is the subject? How does this art work address/activate the viewer? How does it represent/transform the experience of place, space and/or time? What ideas and concepts from the history of new media art seem to engage this artist? Support your argument with specific reference to the ideas and concepts from course readings and in-class discussions.

http://rhizome.org/art/artbase/

4th SEMESTER

Select a public, interactive artwork that utilises locative media, sensing, or other forms of smart technologies and computing.

http://www.trendingcity.org

http://www.trendingcity.org/north-america/2013/3/11/interactive-installations-and-public-spaces

Students may also select from other examples/databases of interactive public art.

> How has the artist used interactivity and the user interface to enhance the viewer's experience? What is this art work about? What is the subject? How does this art work address/activate the viewer? How does it represent/transform the experience of place, space and/or time? What ideas and concepts from the history of new media art seem to engage this artist? Support your argument with specific reference to the ideas and concepts from course readings and in-class discussions.

Hand-In Format: 10 pages (max, excluding bibliography), 12 point font, 2cm margins. Harvard citation references/work cited. All figures must be labelled.

Requirements: MUST include at least three (3) sources from the course reading, plus one original primary source (not in the course literature). Online sources are acceptable, but they must be from a reputable academic source (no blogs or encyclopedia/wikipedia entries).

Module 14 “International Collaboration” (International kollaboration) (5 ECTS) (HSA440025D)

Module 37: International Study Tour/International studietur (3 ECTS)

Location

4th semester

Module coordinator

Palle Dahlsted

Type and language group work in relation to course activities and seminars

English

Module 14: International Collaboration. DRAFT to be updated

Objectives

Module contents: The module “International Collaboration” is a theoretical and practical introduction to methods of collaboration with international art institutions and/or art and design companies, and its possibilities and challenges. The students learn how to organize and implement an international collaborative project. The teaching format is a workshop. The project is supported by relevant literature and cases studies that thematisize and discuss central ideas such as globalization, networked culture, and collaborative creativity.

Courses:

In connection with the module, courses may be offered within the following area: • International Collaboration – Theory and Practice Learning objectives:

During this module, students should acquire: Basic knowledge about

theories and methods of collaborative and networked creativity

the influence of globalization on media art, global interventions and urbanity.

technological conditions and solutions of collaborative work

Skills in

creating conceptual and technological frameworks for collaboration

devising concrete methods of collaboration on the basis of existing methodologies in the

field

Competencies in

analyzing existing conditions of collaboration including analysis of user groups and participating institutions

reflecting on present cultural-historical and media technological conditions and prospective solutions of international collaboration The module is completed with:

Examination 14

An internal written examination in Module 14 “International Collaboration”

Form of examination: c)

The examination consists is an international collaboration project and a reflective report, which must not exceed 10 pages.

Evaluation: pass/fail. One examiner evaluates the assignment. In case of a Fail grade, an additional examiner will also evaluate the assignment.

Substitution: the examination may be substituted by satisfactory and active participation in courses, i.e. 80% presence and submission of all assignments set during the course.

Credits: 5 ECTS

The examination should demonstrate that the student has fulfilled the objectives outlined above.

Module 37: International Study Tour

Location of module: fourth semester

Credits: 3 ECTS

Method of working: Free study activity. Individual or group work in connection with course and seminar activities.

Module contents:

The study tour will be planned with a view to studying international projects within art, architecture, and design. Interviews with significant artist and visits to and possibly workshops at educational institutions relevant for the programme and the academic area will also be included.

On the basis of analysis of artefacts, seminars may be conducted with a view to new interpretation, re-design and re-production.

Objectives:

During this module, students should acquire: Knowledge about

Contemporary art, architecture and design relevant for Art and Technology in an international contexts

Skills in

Describing and analysing artefacts and works within art, architecture, and design in this context

Competencies in

Presenting oral and written analysis of art, architecture and design relevant for Art and Technology.

The Module is completed with:

Examination 37

Examination in Module 37: “International Study Tour”

Examination form: c) The examination is a free assignment which will be evaluated by an internal examiner and awarded a pass/fail grade.

Number of pages: max 5

Evaluation form: Pass/fail. The assignment will be assessed by the examiner. Assignments which are evaluated as failed will also be evaluated by an external examiner.

Substitution: The examination may be substituted by satisfactory active participation in the course, defined as 80% attendance and submission of all course assignments given during the course.

Credits: 3 ECTS

This examination must demonstrate that the student fulfils the objectives of the module.

In this course which combines two modules, students will learn about the collaborative process from a highly practical point of view, while at the same time participate in a study trip to

Gothenburg and the Steneby School of Arts and Crafts, north of Gothenburg, which is a part of University of Gothenburg. Students will work on a sound-related project in collaboration with students from the Steneby. The course will consist of two distinct phases: a preparatory phase and a building phase. There will be a series of workshops in Aalborg to help you prepare and initiate the project work. The study trip will consist of three days at Steneby where you will build your project and have an informal exhibition and critique. Other pedagogical activities, such as artist talks and gallery visits, may be planned in and around Gothenburg as part of the trip.

All students are expected to join the collaboration workshops at the Steneby school. If serious practical circumstances prevent you from joining, please contact the teachers.

ASSIGNMENTS

In additional to the stated assignments under each lesson, for each lesson you are required to log your activities online on WordPress or a similar such site.

EXAMINATION

Per study regulations, the exam for Module 14: International Collaboration is an international collaboration project and individually-written 10-page reflective report. (See the description of the examination from the study regulation above). Those who cannot attend the study trip to Gothenburg/Steneby will still be assigned to project groups and expected to contribute to their group's project to the same extent as the others, possibly preparing suitable parts of the project ahead of time in Aalborg. All students, regardless of whether they attend the study trip, are examined under the same conditions. The group must also prepare online documentation of the project including a brief abstract and media such as images, video and/or sound.

The examination for Module 37: International Study Tour will be substituted by active participation defined as 80% attendance at all planned events during the trip. STUDY TRIP SCHEDULE AND DETAILS, this year week 16 is 18.04-22.04

April 13, Monday	Travel from Aalborg to Gothenburg (bus, ferry)

Possible exhibition or study visit in Gothenburg Travel to Steneby (train, bus)

April 14, Tuesday	Introduction and workshop together with Steneby students
April 15, Wednesday	Workshop
April 16, Thursday	Workshop
April 17, Friday	Travel from Steneby to Gothenburg

free) on a classroom floor or equivalent. http://steneby.se/in-english/	Possible exhibition or study visit in Gothenburg Travel to Aalborg Transportation details will be communicated in the beginning of the course, and students are expected to cover their own travel costs, possible exhibition tickets and food. Students need to bring a sleeping pad and a sleeping bag, since the accommodation will be budget-style (i.e., Information about the Steneby school and their bachelor programs: http://www.hdk.gu.se/en/programmes-courses/crafts-and-design-steneby
Scope and expected performance	
Participants Art 4 students	
Prerequisites for participation	

Module activities (course sessions etc.)

LESSONS

Idea Formulation

Sort out ideas, concept, and respective competencies among participants. Form project groups (on both sides) depending on interests and competencies.

Assignment(s): Create a shared Wordpress (or equivalent) site to document your work process. Research Steneby School to assess competences of students (e.g., what they have expertise in, what have they made, what facilities they have). Brainstorm possible project ideas. Make initial contact with Steneby students.

Lecturer(s): PD

Living Laboratories: Collaborative Practices I

This lecture gives an introduction to collaborative practices between artists, curators and audiences. Based on theories, ideas and examples from international collaborative practices, we will discuss what would be the optimal conditions for production of interactive media art?

Lecturer(s): MS

Literature:

Lizzie Muller and Ernest Edmonds: Living Laboratories: Making and Curating Interactive Art, Taylor and Francis Online Publication, 2007 (Moodle)

Assignment(s): Write a summary of the Muller / Edmonds text

Research on Related Works and Context

Conduct background research to find related works and what the larger context is for your own work.

Assignment(s): Find at least three related works and write a brief abstract describing the key points of each. Situate your own ideas within a larger theoretical and/or aesthetic context. Refer to any works that are not your own using the Harvard referencing style.

Lecturer(s): PD

Idea Walkthrough

Review/walkthrough of each other's project ideas.

Assignment(s): An oral presentation that includes (1) a description of your project idea, (2) the larger context it is situated in and (3) related works. In addition, present a detailed plan for what remains to be done on the project and a timeplan for the workdays at Steneby. Lecturer(s): LP, PD, MS

Prototyping I

Workshop on prototyping ideas at Steneby.

Lecturer(s): LP, PD

Prototyping II

Workshop on prototyping ideas at Steneby.

Lecturer(s): LP, PD

Project Critique

Critique of each others projects at Steneby.

Assignment(s): Present your project(s) to the class. Lecturer(s): LP, PD

Collaborative Practices II: Transdisciplinarity and Participation

This lecture goes further into the ideas of collaboration and its impact on the art production and curating as 'social' or 'real' events or situations. Examples will be given as to how this 'dream' of

the social enters into the work-situation of artists and curators on a number of levels, always approaching transdisciplinarity.

Lecturer(s): MS Literature:

Claire Bishop: “The Social Turn. Collaboration and its discontents”. In Artificial Hells, London:

Verso, pp 11-41. (Moodle)

Mogens Jacobsen and Morten Søndergaard: “MAPPING the domains of Media Art Practice : A trans-disciplinary enquiry into collaborative creative processes” In: Ascott, Roy ed.: Technoetic Arts, Vol. 8, Nr. 1, 01.06.2010, s. 77-84. (Moodle)

Assignment(s): Write a reflection on your prtotype based on the Muller/Edmonds and Bishop texts.