(Placeholder)

Semester details	***Communication, ArT and Technology (CAT)***
School:	***Art and Technology***
Study board:	*September 2014*
Study regulations:	

Art and Technology as Experience – Towards the Future

The students have free hands to work out their finale semester projects, which is a wish they have put forward, which means that the semester as such have no thematic framing. There will be a collaboration portfolio to choose from, but the students can choose to focus on a self-defined problem and/or direct their projects towards future possibilities. Inter/cross/multi-disciplinarity will be at the centre of the main module as well as it will be thought into the sub-modules of the semester. In this last semester it is important to equally support the academic knowledge and practical skills, which will enable students to choose a further path either within academia or within other professional fields relating to art, science, technology and experience.

There will be various types of activities and excursions to support the choice of topic for the project. Through out the semester there will be happenings, artist talks and workshops, both at campus and out-house, that can enable students to fulfil. The semester will be driven equally on formal activities as well on student driven activities, which can enhance the artistic and academic quality.

Proposed collaborative projects so far:

Landshape (contact: Falk Heinrich/Signe Højmark)
Kunsthal NORD – front hall exhibition space (contact: Henrik Brock-Lips)

Semester organisation and time schedule

The semester will be driven by a high level of participation from the students. Very early and continuous meeting activities will ensure that discussions about project concepts and possibilities are carried out in correlation with a continuing follow up on progress. The aim is to place courses early in the semester and organize courses and course modules in a manner that frees up time for project work as well as a free final period to conclude projects. An overall structure for presentation of project progress and challenges are sought through internal deadlines where mini Pecha Kucha's and other presentation forms aim to sharpen the focus and strengthening the workflow. The development of project topic and themes should be done in close collaboration with the advisors.

Semester coordinator and secretariat assistance

Semester coordinator: Betty Li Meldgaard – betty@hum.aau.dk

Secretary: Anne Nielsen – amn@hum.aau.dk

Module 19 - Art and Technology as Experience - BA-project/20 ECTS

Oplevelsesteknologi – BA-projekt/20 ECTS

Activity Code: HSA66027H

Location

ArT 6. semester

Module coordinator

Betty Li Meldgaard

Type and language

Main semester module Language: English

Learning objectives:

The objective of Module 19: Art and Technology as Experience - Bachelor Project is to enhance students' understanding of problem areas and solutions in relation to the creation of interactive artefacts, installations, and performances of artistic quality. During this module, students should acquire:

Basic **knowledge** about

- artefacts, installations, and performances whose objective is either to entertain, inspire, raise awareness, or in other ways affect audience or participants
- installations, artefacts or performative events, taking into account the weighting of artistic, technical, material, contextual and functional considerations
- methods in connection with the creation of installations, artefacts or performative events as part of the experience culture

Skills in

- identifying and formulating an artistic challenge and experience-oriented demands on the basis of a problem statement defined by the student
- analyzing the artistic problem and developing alternative concepts to deal with it
- creating and selecting artistic means and the application of technologies
- developing and realization of installations or artefacts as part of the experience culture

Competencies in

- creating engaging experience designs as a synthesis of creative expression, technology, and human performance/participation in artistic settings applying
- theoretical and analytical skills to the design of an artefact, and reflecting on its functionality, technological choices and artistic means of expression choices
- describing the completed design at a professional level and communicating it to external recipients.

The subject must be presented to the Board of Studies in the form of a brief problem statement. The Board of Studies must approve the subject of the BA project. A minimum of 3 subject focus fields represented by the main modules in semesters 1 – 5 of the program should be included in the BA project.

Examination 19 An external combined written and oral examination in Module 19 "Art and Technology as

Experience" (Bachelor Project)" (Oplevelsesteknologi (Bachelorprojekt)).

Form of examination: b) The examination will take the form of a conversation between the student(s), 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. Number of pages: the written work must consist of not less than 15 pages and not more than 20 pages per student (not more than 25 pages in the case of individual reports). Abstract: An abstract must be produced in Danish. The abstract must consist of not less than 1 page and not more than 2 pages. The abstract is included in the overall evaluation of the project. 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 aggregate grade is awarded for the artefact, the written and oral performances. The assessment results in an individual grade.

Credits: 20 ECTS

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

(Excerpt from study regulations 2015)

Academic content and conjunction with other modules/semesters

Method of working: Project work in groups or individually

Credits: 20 ECTS

Module contents:

This module emphasizes the importance of working towards a synthesis of technological, aesthetic, and interactive functional solutions. The focus of the module is to conceptualize, develop, and exhibit physical and/or virtual artefacts, installations, performances, etc. challenged by a need or wish to create engaging experiences inspired by relevant technological potentials, typically in the form of new technologies.

Projects and project activities will be of the following type:

1. identifying and localizing experience-oriented requirements and needs,
2. on the basis of the above: undertaking conceptualizations, visualizations and manifestations, i.e. by means of analogue or digital technologies,
3. on the background of bullets 1. and 2. realize results in an experience design or design concept.

The product and the project must at the same time be theoretically and analytically supported; this should be reflected in the functionality, technological choices, use and aesthetic representation of the final semester project.

Courses:

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

Artistic and Academic Methodology VI

Theory and Philosophy of Experience

Programming IV

Performance Technology II

(Excerpt from study regulations 2015)

The semester's module content points to past semester's content and projects as well as the future possibilities.

Scope and expected performance Development of final BA project. High level of self participation in developing topics and themes.
Participants 6 semester BA ArT students
Prerequisites for participation

Theory and Philosophy of Experience	2 ECTS
Secretary:	Anne Nielsen
Responsible Coordinator:	Betty Li Meldgaard
Lecturers:	Ståle Stenslie Richard Shusterman Else Marie Bukdahl
Purpose and goals:	This course will introduce some of the most important approaches to experience. Emphasis is put on the aesthetic experience, but also experience in relation to other dimensions in our everyday lives as well as experience as a sensorial and bodily concept ambient contexts. Though theoretical in content, the lectures urges the importance of reflection on the different approaches in relation to both the field of art and your projects: How are the different conceptual discussions of experience of relevance for your project and what consequences do the different approaches imply?
Examination	The course is part of the main module content and is therefore evaluated through the semester project.
Title 1:	Introduction to experiences, aesthetics and the aesthetic experience
Lecturer:	Ståle Stenslie
Content:	The concept of experience has a wide range of meanings. It can be about anything from a learning experience to a momentous revelation. Experience is part of what shapes us as a person and guides our everyday practical knowledge. Experience and aesthetics have a long history of mutual relation – the aesthetic dimension affects us in various ways from giving physical pleasures to emotional and mental responses that profoundly change our understanding of the world and ourselves. What happens for example if we look too much at art?
Assignments:	Read the mandatory text and prepare questions for discussion. Produce a small diagram of relevant questions, concepts and theoretical elements in relation to your project.
Literature:	- http://www.frieze.com/issue/article/the_shock_of_the_old/ - Section 3.1 in http://plato.stanford.edu/entries/aesthetics-18th-german/#Bau
Title 2:	Pragmatism and the artistic experience

Lecturer:	Ståle Stenslie
Content:	The lecture will cover the most relevant discussions within pragmatism in general and Deweys foundational text on art and experience in particular. Dewey shifted the aesthetic focus away from the material 'work of art' towards the development of an 'experience'. One fundamental part of having an experience is that it is something that personally affects your life.
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	- http://plato.stanford.edu/entries/dewey-aesthetics/ - Dewey, John. *Art as Experience* (1934).
Title 3:	Phenomenology: corporal foundations of experience and the aesthetic
Lecturer:	Ståle Stenslie
Content:	The lecture introduces a phenomenological understanding of experience in the arts. In phenomenology the object of study is our experience. It is a field trying to understand how we experience overall. Phenomenologically speaking, the physical origin of experience becomes central. How is this manifested in the arts?
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	Smith, David Woodruff (2005) Phenomenology. THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Winter 2005 Edition), http://plato.stanford.edu/archives/win2005/entries/phenomenology/
Title 4:	Experience and art in subject oriented biology
Lecturer:	Ståle Stenslie
Content:	In his studies of nature the German biologist Uexküll describes living organisms, including the human, as something more than reflexive machinery dominated by causal mechanisms and as a product of natural selection. According to Uexküll we can first understand the complexity of relations and adaptation in nature if we understand organisms as active subjects. The lecture will discuss how this impacts the aesthetic experience.
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	Stenslie, Ståle (2010) Virtual Touch, section 5.3.4. https://virtualtouch.files.wordpress.com/2010/10/virtual-touch-stenslie-wcover.pdf
Title 5:	Embodiment in interactive art
Lecturer:	Ståle Stenslie
Content:	Experience is about us undergoing something – we become affected, emotional stirred or intellectually challenged. An important element is how we are sensorial and bodily involved; we place ourselves in situation where we experience something. This placement is bodily and our bodily positioning is of importance for what and how we experience.

	Important is to become aware of our bodily positions and attitudes, and how we can also work with them, both manually and in contexts of interactive media.
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	Stenslie, Ståle (2010) Virtual Touch, section 5.3.4. https://virtualtouch.files.wordpress.com/2010/10/virtual-touch-stenslie-wcover.pdf Shusterman, Richard *Pragmatist Aesthetics. Living Beauty, Rethinking Art.* Rowman & Littlefireld Publishers, Inc: Lanham ²2000. http://www.fau.edu/humanitieschair/pdf/Somaesthetics_A_Disciplinary_Proposal.pdf
Title 6:	Appropriation of space and place: on the Flâneur and his aesthetic experience
Lecturer:	Ståle Stenslie
Content:	The Flaneur is a central symbolfigure of the experience of space and place. His mobilized gaze is central to avant-garde movements such as the Situationists. The lecture looks at the Flaneur from both critical theories of aesthetics expecting art and aesthetics to have a critical potential to opportunistic uses of spectacles such as encountered in the experience economy
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	- Keith Tester (2014) The Flaneur (RLE Social Theory). Routledge. - http://psychogeographicreview.com/baudelaire-benjamin-and-the-birth-of-the-flaneur/
Title 7:	Somaesthetics I
Lecturer:	Richard Shusterman
Content:	Introduction to Somaesthetics
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	Shusterman, Richard *Pragmatist Aesthetics. Living Beauty, Rethinking Art.* Rowman & Littlefireld Publishers, Inc: Lanham ²2000. http://www.fau.edu/humanitieschair/pdf/Somaesthetics_A_Disciplinary_Proposal.pdf
Title 8:	Somaesthetics II
Lecturer:	Else Marie Bukdahl
Content:	Examples from the world of art. Else Marie Bukdahl will present various artists and how they work with experiences relevant for Somaesthetics
Assignments:	Read the mandatory text and prepare questions for discussion.
Literature:	The Online Journal of Somaesthetics, www.somaesthetics.aau.dk

Artistic and Academic Methodology (AAM) VI (1 ECTS)

Lecturer: Betty Li Meldgaard

The course contains 4 x 2hr. lectures

In the 4 lectures the focus will be on interdisciplinarity, design research/research design, methods and techniques for creative praxis and how to work with problem statements as a principle that guides the research approach.

1st and 2nd Lecture: Research design/design research – how to plan experiments and manage the workload

These lectures focuses on aspects of experimentation and how to manage complex processes as a collaborative task through the use of the agile method of SCRUM .

They introduces the students to creative methods for working out the right conceptual and experimental framing and further investigates exhibitions and other settings as a forms of laboratories.

Litt.: (tentative)

Fallman, D. “The Interaction Design Research Triangle of Design Practice, Design

Studies, and Design Exploration”, Design Issues, 2008

Muller & Edmunds, “Living Laboratories: Making and Curating Interactive ArT”,

Sutherland, J. “Scrum: The art of doing twice the work in half the time”, 2015

Harrison, Beck & Tatar (2006).“It’s just a method” – A Pedagogical Experiment in Interdisciplinary Design.” DIS '06 Proceedings of the 6th. Conference on Designing Interactive Systems.

Krogh, Markussen & Bang, “Ways of Drifting—Five Methods of Experimentation in Research Through Design”, in A. Chakrabarti (ed.), ICoRD’15 – Research into Design Across Boundaries Volume 1, Smart Innovation, Systems and Technologies 34

Biskjaer, Dalsgaard & Halskov, (2010), “Creativity methods in interaction design”. Proceedings of the 1st DESIRE Network Conference on Creativity and Innovation in Design

3rd Lecture: Interdisciplinarity – Re-framing the problem statement

Five characteristics of interdisciplinary research approaches/methods will be introduced, which forms the basis for a re-framing of “the problem statement” in the light of interdisciplinary methodologies, where the science of art and technology will be the focus in relation to experiential, cultural and social aspects regarding artistically framed questions/statements.

Required reading:

Weingart & Stehr (ed.) (2000). “Practising Interdisciplinarity”. Toronto. University of Toronto Press.

Vaus de, David, “Research design in social research”, 2001, SAGE pub. Ltd. (in excerpts TBA no later than 2 weeks before the course).

Links for examples and inspiration:

Writing in Art – http://www.cgu.edu/pages/7483.asp

Dr. Karen’s (partial) rules for the Artist’s Statement – www.theprofessorisin/2015/01/20/dr-karens-partial-rules-for-the-artists-statement

4th Lecture

The forth lecture sums up the previous and puts the students work, so far, into a broader research perspective based on a max. 10-line abstract handed in by students. The purpose is to utilize presented methods and turn them into applicable frameworks for planning the practical processes and writing the BA-

report.

Examination

The course is part of the main module content and is therefore evaluated through the semester project.

Performance Technology II

Contemporary performances (theatre, dance, music, opera) increasingly incorporate level of interactive and generative technologies. Emerging technologies for augmenting and tracking human performers using video projection, computer vision, and algorithms play a central role in these performances. More than merely static backdrops, interactive projections expand the possibilities for bridging scenic design and live performers.

In particular, the field of dance has embraced emerging technologies in novel ways. Dancers perform in front of many cameras at once, appear on multiple screens, sometimes utilizing and manipulating motion capture data in real time. Dancers can appear instantaneously on screens all over the globe, re-choreograph motions, or map their bodies into simulated environments. These courses are combined to teach students about contemporary innovations in stage technologies and live performance, wit ha special emphasis on video projection and computer vision.

Course Objectives

To gain a critical understanding of the history, aesthetics, and techniques of performance technology with a focus on computer vision tools and dance.

To develop approaches to interface and system design for real-time projections and augmented animations in performance

To develop creative approaches to expression in performance using video and computer vision tools

Key Terms:

- Tracking, Mapping, and Rendering
- Special focus on dance, kinesics, kinæsthetics, video, motion capture,
- New media and performance
- Movement practices
- Improvisation and real time systems
- Screen-dance and movement based installation
- Choreographic scores and new media tools (generative tools)
- Movement, somatics and technology
- Mobile devices, locative media and choreography
- Social media and trans-local collaborations

Students are encouraged to apply their prior experience with programming, methods, and software tools to combine video projection with computer vision tools in live performances (OpenCV, Processing, Kinect, Resolume, MAX MSP, etc.).

This assignment is a 2-page description/treatment for a live performance that incorporates technology, dance, choreography and at least two (2) techniques for image processing, video capture and computer vision.

The two-page hand-in is a DESIGN or SCHEME for a live performance.

It should include

1) Project Description (what you are doing--dance, theatre play, concert, solo performance, number of performers, location).

2) A diagram of the space where the performance takes place (it must be in an EXISTING space--the lecture room, Theatre Nordkraft, Aalborg Theatre, the large lecture hall in CREATE, a rooftop in Aalborg, etc) and the technology set-up (where cameras, sensors, speakers, videos cameras, projectors, etc. should be positioned). You should also indicate on this diagram where the performance takes place, where the audience is positioned and how they will perceive the performance (e.g. in person, streamed on a website, on a phone, in a movie theatre, through a peep hole, telematically, etc.)

3) A short performance score (1-2 paragraph description of what actually *happens* during the course of the performance).

4) Supplementary material including images/stills/drawings/sketches that give a strong impression of the overall look and feel of there performance.

5) A list of the software tools that you will require to execute the performance.

6) A short bibliography of art works or readings that inspired you.

You may work together in groups no larger than three persons. Or you may choose to work alone.

Assignments are due ONE WEEK following the end of the PERFORMANCE TECH II classes.

Performance Technology II (4 lessons)

Lesson 1: *Kinesics and Kinesthetics 1*

This lecture considers the subject of kinesics: the generation and interpretation of non-verbal behavior expressed as movement of the body. Artistic choreography (found in theatre, dance, mime, and puppetry) relies on kinesics to generate expressive movement that conveys meaning and information, resulting in a unique aesthetics of movement. We consider examples from contemporary dance that combine digital technologies—including software tools and motion capture systems—with hardware to generate technologically-enhanced kinesthetics. Examples include Merce Cunningham (Lifeforms, BIPED); Recoil Performance Group; Troika Ranch; Johannes Birringer; and Ken Goldberg's *Ballet Mori*.

Requried Reading:

Foster, S. "Kinesthetic Empathies and the Politics of Compassion" (*Critical Theory and Performance*) pp 245-257 (AUB-Online)

Salter, C. *Entangled*, 2010. "Bodies" (pp. x-242) (pdf)

Lesson 2: *Kinesics and Kinesthetics 2:*

This lecture continues the study of kinesics and choreography. We will look at examples from contemporary artists working in dance, with a special focus on motion libraries, animation tools, and choreographic platforms and approaches. Artists and works include: Stalker Theatre (*Encoded*), Chunky Moves, Alien Nation Co., and aritsts from KZM.

Reading:

Salter, C. *Entangled*, 2010. "Bodies" (pp. 243-end)

Dance and Media Technologies (2002) by Johannes Birringer. Special Issue of *PAJ* Journal of Performance and Art. (excerpts)
http://www.mitpressjournals.org/doi/abs/10.1162/152028101753401811?journalCode=pajj#.VpUs1ktvrVs

Capturing Intention (2007) by Christian Ziegler (http://on1.zkm.de/zkm/e/artists/Ziegler)
(http://www.movingimages.de/?type=text&txt_id=40&lng=eng)

Electronic Memory Design: from Archiving to Rehearsal Software " (pdf)

Lesson 3: *Bodies Confronted by Technology*

This course considers dramaturgy of the posthuman: How does technology impinge upon, undermine and reconstruct imaginative constructions of human bodies and their engagement with the environment? This course considers the views of scholars and artists working at the vanguard of this area in performance studies, including Louis-Philippe Demers, Jennifer Parker-Starbuck, and Cody Poulton. The course explores how we need to redefine the nature of the actor and subject, both in performance and "real life." Artists: Toni Dove (*Lucid Possession*).

Required *Readings*:

Cyborg Theatre: Corporeal/Technological Intersections in Multimedia Performance by Jennifer Parker Starbuck (pdf)

Augmented Performance in Dance and Theatre by Flavia Sparacino et al. (pdf)

Lesson 4: *Pygmalion Project*

This course uses a lecture/demonstration format to introduce the Pygmalion Project, a research project by Northwestern University (NU-USA), Georgia Institute of Technology (GATECH-USA), and Disney Research to develop a platform for robotic marionettes. The lecture includes a demonstration of original software written for Microsoft Kinect that generates puppet choreography based on human motion capture data and a corresponding hardware platform for generating automated performances. Students will be asked to generate idea concerning how to this technology might be applied to art practice, "Edutainment" robotics, or other research areas.

Required *Readings:*

Jochum and Murphey "Programming Play", 2013.

"Control and Art" (Ed. Amy LaViers, Magnus Egerstedt) Springer 2013.

Examination

Performance Technology II and Programming IV are part of the main module and will be evaluated through the semester project.

Programming IV - 1 ECTS

Lecturer: Markus Löchtefeld

Purpose and Goals:

The purpose of this course is to introduce techniques in image and video processing that can be used in programming real-time interactive systems. Specifically, the course will focus on the mapping of visual information into artistic representations. The course will be workshop based where students will be introduced to a topic and then work in small groups on a related exercise. The course is meant to complement Performance Technologies II in providing basic knowledge about programming performance-based and interactive artworks.

The primary tool used for the course will be the OpenCV computer vision library (http://opencv.org). The main sources of information will be the following as they are the most up- to-date:

"OpenCV API Reference", http://docs.opencv.org/modules/refman.html

"OpenCV Tutorials", http://docs.opencv.org/doc/tutorials/tutorials.html

Lecture 1 – Image Processing

Markus Löchtefeld

Basic ways of manipulating images including blur, edge detection, other convolution-based filters, and

median filtering.

Assignment(s):

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

Literature:

Smith, S. W. (2011). "The Scientist and Engineer's Guide to

Digital Signal Processing", Chapter 23: Image Formation & Display: Digital Image Structure, http://www.dspguide.com/ch23/1.htm.

Smith, S. W. (2011). "The Scientist and Engineer's Guide to

Digital Signal Processing", Chapter 24: Linear Image Processing: 3x3 Edge Modification, http://www.dspguide.com/ch24/2.htm.

Reference:

http://docs.opencv.org/modules/imgproc/doc/filtering.html

http://docs.opencv.org/doc/tutorials/imgproc/erosion_dilatation/erosion_dilatation.html

http://www.imagemagick.org/Usage/convolve/

Lecture 2 – Video Capture

Markus Löchtefeld

Displaying video from files and cameras. Time-based video effects including feedback and motion detection.

Assignment(s):

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

Lecture 3 – Optical Flow

Markus Löchtefeld

Estimation of apparent motion in visual scenes using optical flow.

Assignment(s):

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

Literature:

"Optical flow - Wikipedia, the free encyclopedia", http://en.wikipedia.org/wiki/Optical_flow Further study:

Shah, M. 2012. "UCF Computer Vision Video Lectures 2012: Lecture 6 - Optical Flow", https://www.youtube.com/watch?v=5VyLAH8BhF8

https://www.youtube.com/watch?v=TbJrc6QCeU0 https://www.youtube.com/watch?v=JlLkkom6tWw

Lecture 4 – Blob Detection

Markus Löchtefeld

Identifying regions of similarity using blob detection.

Assignment(s):

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

Literature:

http://docs.opencv.org/modules/features2d/doc/common_interfaces_of_feature_detectors.html#simpleblobdetector

Module 29 - Art & Technology Entrepreneurship (5 ECTS)

"Oplevelsesteknologi og entreprenørskab" (5 ECTS)

Location - *6th semester*

Module coordinator

Claus A. Foss Rosenstand

Type and language

Lectures and workshop with individual or group work in relation to course and seminar activities.

The course is in English.

Objectives

The module introduces entrepreneurship and marketing of art and technology products as an integrated design feature. On the basis of different theoretical positions, the module presents various marketing and strategic design methods and evaluation methods. The module entails analysis of the relationship between art and technology products, their contexts, and various marketing strategies with the view to create suitable entrepreneurial strategies for art and technology products.

Basic **knowledge** about

- theories on strategic communication and marketing of experience products
- methods of analysis and interpretation of well-known marketing practices in a given commercial context

Skills in

- applying methods of entrepreneurship and marketing practices in a given commercial context
- analyzing and identifying possible markets and consumer and target groups

Competencies in

- applying acquired knowledge about marketing and entrepreneurship to existing and future projects within the field of Art &Technology.
- constructing synergy between marketing, entrepreneurship and artistic artifacts

Academic content and conjunction with other modules/semesters

The module consist of an introduction lecture (3 hours) and a two day workshop (20 hours) placed at the Landshape Festival in Blokhus the 2nd to 4th of June, 2016 – www.land-shape.net

The introduction lecture by Claus Rosenstand

Introduction to the program and literature, which should be studied by Art & Technology before the Land-Shape workshop. Moreover it gives an introduction to the innovation methodology, which will be used at the workshop.

Literature:

Østergaard, Rosenstand, Gertsen & Levang: Into the Surge of Network-driven Innovation, 2013

Worskshop: IT media, visual cultures and strategic communication by Tem Andersen (mid /ultimo April).

The workshop will present a theoretical framework enabling students to understand and research visual cultures, visual media, visual IT paradigms, the strategic and creative use of visual social media. In the workshop students will work with both analytical and practical problems in relation to researching, comparing and evaluating strategic visual designs for their potential for communication and learning.

The workshop will take place in Nordkraft, AAU City Campus. The workshop will last 12 lessons combined to 1,5 days.

Literature:

Barichello, Eugenia Mariano da Rocha & Lucianna Menezes Carvalho (2012). *Understanding digital social media from McLuhan's idea of media-ambience*. Journal article (link). (10 s.)

Kietzmann, Jan H. et al. (2011). Social media? Get serious. Understanding the functional building blocks of social media. *Business Horizons Vol. 54, 241-251*. (10 s.)

McLuhan, Marshall (1964). *Understanding Media*. Abingdon: Routledge Classics. P. 3-80 (77 s.)

Meyrowitz, Joshua (2001). *Morphing McLuhan: Medium Theory for a New Millennium*. Proceedings of the Media Ecology Association, Vol. 2. (15 s.)

Burgess, Jean & Joshua Green (2009). *YouTube. Online Video and Participatory Culture*. Cambridge: Polity. P. 15-37, 58-74. (40 s.)

Workshop on Land-Shape by Claus Rosenstand and Martien Miehe-Renard

This workshop is a three day intensive reflection in action workshop staged as a role play game; ending with a student presentation of an entrepreneurial business case. Because of the genuine business structure in the field with many small and medium size companies not covering the full value chain from idea over product to consumption, the students will be divided into teams, which as in real life has to cooperate and compete at the same time; while they manage their resources.

The artworks at the Landshape Festival will be included in the workshop case; and the students will have to consult the artists, which will be present at the festival, behind the works.

Through the workshop there will be time-outs, where there will be reflection on action. In theses time-outs relevant business cases from real life and theory on innovation, entrepreneurship, marketing and strategic communication will be presented and discussed.

Literature for workshop will be announced at the introduction lecture including "How to find venture capital" by Lars Krull.

Except from the introduction lecture both lectures and workshop will be mix classes with students from communication and digital media studies. There is a totally maximum of 40 students – including all Art & Technology students.

Examination - moduleEvaluation: pass/fail. One examiner evaluates the assignment. In case of a Fail grade, an external 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.

80% participation will be chosen as the examination form. In order to pass the course students have to partake in the workshop and lectures by attending and fulfilling the assignments. In practice this include full participation in the workshops.

If students do not pass on the attendance requirement a written assignment will be given based on a case and texts for analysis.

Lecturers:

Associate Professor, Ph.D Claus A. Foss Rosenstand. Claus has been teaching and researching in innovation and entrepreneurship for more than 10 years; and he has a special focus on digital media

creation. Moreover he is a parallel entrepreneur, and he has been involved in many start-ups.

Associate Professor, Ph.D Tem Andersen. Tem has been teaching and researching in media and strategic communication focusing on user and consumer studies and new media technology.

Storyteller Martin Mie-Reheard. Martin has worked in the creative industry of art for many years. He has worked with books, computer games, theatre, television, movies, cross-media etc. Moreover he is also a parallel entrepreneur, and he has been involved in many start-ups, including a speciel focus on the relationship between art, strategic communication and marketing.

Prerequisites for participation

The student must be on the 6th semester of the bachelorprogramme in Art & Technology.

Module 20 - Play and Event (elective) (5 ECTS (2 ECTS lecture – 3 ECTS supervision and student work))

Danish and English title

5 ECTS

Location

6th semester

Module coordinator

Betty Li Meldgaard – betty@hum.aau.dk

Type and language

Elective

Language: English

Objectives

During this module, students should acquire:

Basic knowledge about

- basic theories and dramaturgies of play-based design and events
- various mobile technologies and their usage in ludic artefacts and events

Skills in

creating and describing concepts of play-based artefacts and events

using and employing mobile technologies Competencies in

designing, implementing, and reflecting on ludic artefacts and events

applying ludic strategies to other fields

Academic content and conjunction with other modules/semesters

The purpose of the module is to give an introduction to various theoretical positions within game research in order for students to get thorough knowledge about the field.

Further it is the purpose of the module, through lectures and workshops to enhance student's

competences in the design of ludic artifacts in relation to artistic events.

The module re-frames art works by applying ludological strategies to artistic interventions and interactivity with the purpose of expanding notions about interaction, participation and co-creation in relation to the immersive aspects of ludic experiences. The course plays into the general approach on the main module to improve and enhance students knowledge about art works as playable artifacts, audience experience and the relation between objective ludic mechanics and theoretical positions regarding ludic experiences.

Studying Interactive Digital Games I &II

Lecturer: Betty Li Meldgaard

Lectures 1, 2, 3 and 4 (will be placed as 2x2 hr. lectures)

The first four lectures are given consecutively, in order to concentrate the focus on researching digital interactive games

Studying interactive digital games is a somewhat new endeavour and dates back, according to

Espen Aarseth (gamestudies.org) to 2001, that is, officially. In the short span of time, game studies have taken numerous theoretical and thematically turns, which will be presented during the lectures. The first lectures will therefore look at the ludological turn, the spatial turn, the cognitive/emotional turn and eventually incorporate a perceptual approach. The purpose of the first lectures is to give the students a basic understanding of the theoretical approaches within “state of the art” game research. This part will form a foundational understanding of games and ludic artifacts, the interactive mechanics and the correlation between ludic and narrative means of engagement.

Literature:

Aarseth, E., “Computer Game Studies, Year One” - http://www.gamestudies.org/0101/editorial.html

Eskelinen, M., “The Gaming Situation” - http://www.gamestudies.org/0101/eskelinen/

Güntzel, S., “The Space Image”, Conf. Proc. Philosophy of Computer Games, 2008, DigaRec

Series

Grodal, T., “Stories for Eyes, Ears and Muscles: Video Games, Media and Embodied

Experiences” in “Video Game Theory Reader”, Routledge 2003

Lecture 5 - The Physical and Virtual Interface

Lecturer: Betty Li Meldgaard

This lecture will look at the various interfaces involved, with a main focus on the physical means of control and the virtual effects. Playing games or participating in ludic events, involves physical as well as cognitive/perceptual/emotional engagement. In this lecture we will look at various types of interfaces and the lecture will offer proposals on how to work theoretically with the diversity/mutuality of physical vs. virtual. The purpose of this lecture is to extrapolate the various levels of interaction involved in ludic design and how they can be approached theoreticallyand applied practically.

Literature:

Juul, Jesper, “A casual Revolution: Reinventing Video Games and their Players”, (in

excerpts regarding mimetic interfaces and the means of control (Kinect, Wii)), 2010, MIT

Press

Clark, A., “Re-Inventing Ourselves: The Plasticity of Embodiment, sensing and Mind”, Journal of Medicine and Philosophy, 32:263 – 282, Taylor and Francis Group, 2007

Lecture 6 - Playable Artifacts – Beyond "Gameness"

Lecturer: Betty Li Meldgaard

This lecture will broaden the "traditional" concepts of games and look at various types of playable artifacts. The lecture will offer a critical discussion of the approaches seen so far in games studies and point to future and more artistic approaches to game design and game theory. The ludological approach, as presented in the first lectures, may be a constraining approach if more artistic means/expressions and game play solutions are applied to playable artifacts.

Literature:

Leino, O., "Death Loop as a Feature".

http://gamestudies.org/1202/articles/death_loop_as_a_feature

Weibel, P., in "Future Cinema: The Cinematic Imagenary after Film. (Electronic Culture: History, Theory, and Practice)", 2003, MIT Press

Supplementary Litterature:

Manovich, L. " The Language of New Media", MIT Press, 2002

"Video Game Theory Reader 1", ed. Wolf and Perron, 2003, Routledge

"Video Game Theory Reader 2", ed. Wolf and Perron, 2009, Routledge

Other activities:

Following the last lecture will be a workshop centered on the students game development proces and progress and the module will be finalized with a presentation of concepts in plenum with invited teachers/supervisors who will give qualified feedback.

Scope and expected performance

It is expected that students participate in the assignments given, which will be related to the main semester project.

Examination:

Satisfactory and active participation in courses i.e. 80 % presence and submission of all assignments set during the course. Pass/Fail. If students do not fulfil the above requirements a substitute written assignment will be given.

Prerequisites for participation

Mobile Technologies	1 ECTS
Secretary:	Anne Nielsen
Responsible Coordinator:	Betty Li Malvang Meldgaard
Lecturers:	Ståle Stenslie
Purpose and goals:	The course explores mobile technologies through a practice based approach. The students will create augmented reality (AR) applications involving interactive images, video and sound. The learning goals are to acquire a basic understanding of AR, its

	applications, tools & approaches. Students will get knowledge and hands-on skills on how to construct AR projects and how to make 'invisible' data visible.
Examination:	This course is assessed as part of the examination in module 20
Title 1:	Introduction to AR concepts, methods and techniques
Lecturer:	Ståle Stenslie
Content:	The lecture will introduce various AR concepts, methods and techniques, followed by a rapid prototype workshop on the basis of Aurasma.com and its applets for smartphones.
Assignments:	Apply one or more images of your choice to an Aurasma demo
Literature:	Kipper G., Rampolla J.(2012) Augmented Reality: An Emerging Technologies Guide to AR. Elsevier. http://www.aurasma.com, www.buildar.com, https://www.layar.com/
Title 2:	Geotagged and Mobile AR worlds
Lecturer:	Ståle Stenslie
Content:	The lecture will continue the introduction to various AR concepts, methods and techniques, with main focus on location based, geotagged AR applications on smartphones.
Assignments:	Sketch out an example for geotagged AR application
Literature:	Kipper G., Rampolla J.(2012) Augmented Reality: An Emerging Technologies Guide to AR. Elsevier. https://www.layar.com/ http://www.theguardian.com/technology/augmented-reality
Title 3:	Geotagging your AR experience
Lecturer:	Ståle Stenslie
Content:	The lecture will continue an hands-on approach of how to construct a geotagged AR experience.
Assignments:	Prepare a prototype/sketch for presentation in class
Literature:	Kipper G., Rampolla J.(2012) Augmented Reality: An Emerging Technologies Guide to AR. Elsevier. https://www.layar.com/
Title 4:	Dissemination: how to present, exhibit and promote AR projects
Lecturer:	Ståle Stenslie
Content:	Once an AR application has been built, how do you present it for a wider audience? The

	lecture will discuss how AR projects can attract attention in real life.
Assignments:	Present your prototype AR application/concept to class
Literature:	