

# ArT6: Art and Technology as Experience Bachelor Project 2015 Aalborg University

# Art and Technology in Real Life

| Semester details   |   |
|--------------------|---|
| School:            | Communication, ArT and Technology (CAT)           |
| Study board:       | Art and Technology                                |
| Study regulations: | BA Studyprogram in Art and Technology, Sept. 2014 |

# Semester framework theme – Art and Technology In Real Life (IRL)

The semester will take its outset in the experience of art and technology in real life/IRL. Since this is the last semester at the ArT study program, the students will be encouraged to work with projects that relates to and are created within a real situation. This means that the focus is heavily on strengthening the theoretical foundation for an applied approach of theory to real life situations. 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 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.

Proposed projects:

# Suggestions for ArT6 projects – external collaboration

# The Culture Meeting in Nykøbing Mors (Kulturmøde Mors 2015) (Contact person: Line Bruun Jespersen)

The head curator of the culture meeting would like to have a evaluation station at the culture meeting. It should be a small kiosk/confession chair/station where the participants can record their opinions or thoughts in either sound or video. The messages must be stored and they should be broadcasted either from the kiosk or from other stations at the culture meeting.

The idea is to make it inviting/fun/interesting to contribute to the evaluation and documentation of the culture meeting and the kiosk must contribute to the creation of atmosphere and the architectural/design identity of the meeting.

ArT2 will be collaborating with Kulturmødet too, so Line function as contact person to the curator.

http://kulturmoedet.dk/forside.aspx#0?end=7

20.-22.8.2015

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# Kulturfærgen OM:FORM

The Culture Ferry OM:FORM

The culture ferry (at the moment it resides in Østre Havn) will go on a Tour de Limfjord this summer. The tour start at Tall Ships Races in Aalborg, then Løgstør and it ends in Nykøbing Mors at the Culture Meeting. The Culture Ferry wish to collect knowledge and material from the Tour and document the experiences/knowledge in the form of artworks that can be shown in all three harbours. The art works can contain audio, video, photo, installations. Maybe the artworks can float? – and they must, of course, be easy to transport on the ferry and easy to install.

Tall Ships Races, Aalborg 1-04.8.2015 http://www.tsr15.dk

Løgstør

Kulturmødet på Mors 20.-22.8.2015 http://kulturmoedet.dk/forside.aspx#0?end=7

ArT2 will be collaborating with OM:FORM too, so Line function as contact person to OM:FORM.

# LandShape

LandShape is a land art festival that will take place in Northern Jutland, close to Hansholm Fyr. The festival operate with at very broad definition of land art, so there will also be possibilities to work in/with different technologies. LandShape invite students from many different studies to be part of the festival.

Falk Heinrich is contact person to LandShape, and he will be able to tell you more.

LandShape, first week of June http://www.land-shape.dk

More project suggestions will emerge as these to some extend depends on student involvement and proactivity in relation to finding collaborators.

# 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 course and course modules in a manner that frees up time for project work. An overall structure for presentation of project progress and challenges are sought trough internal deadlines where mini Pecha Kucha's and other presentation forms aim to sharpen the focus and strengthening the workflow.

#### 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 (15 ECTS + 5 ECTS courses) 20 ECTS

Oplevelsesteknologi – BA-projekt (20 ECTS)

Activity Code HAS 660027 H - 20 ECTS

#### Location

ArT 6. semester

#### Module coordinator

Betty Li Meldgaard

Main semester module

Language: English

# 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.

The module is completed with:

# **Examination 19**

An external combined written and oral examination in Module 18 "Art and Technology as Experience" (Bachelor Project). 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.

Form of examination: b)

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.

# Academic content and conjunction with other modules/semesters

Method of working: Project work in groups or individually

**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, and 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,

on the basis of the above: undertaking conceptualizations, visualizations and manifestations, i.e. by means of analogue or digital technologies,

3. and on this background realizing 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

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

possibilities.

#### Theory and Philosophy of Experience (1,5 ECTS)

# 1<sup>st</sup> Lecture "Experience and Aesthetics"

The concept of experience is a concept with a wide range of meanings. It can be about events that for a moment affect us as well as something we learn from and which forms us as person and constitutes our practical knowledge. Experience and aesthetics have a long history of mutual relation – the aesthetic product or event affect us in many ways, from giving pleasure or some emotional response to profoundly changing our understanding of an object or phenomena.

Lecturer: Elizabeth Jochum

Required Readings: Goodman, Nelson. *Ways of Worldmaking* (1978)

Dewey, John. Art as Experience (1934).

# 2<sup>nd</sup> Lecture "Atmosphere.

Atmosphere, or ambiance, has been introduced as a fundamental concept in aesthetics and in relation to characterizing places and spaces as affecting us. We may experience a place to be tense, hectic, bright, cozy, etc. This is the matter when we are aware of how places are but we may also be affected without being aware of it. Atmospheres are products of sensorial elements like the quality of the materials, the different smells, the proportions of the spatial elements, etc. Working with atmospheres is very much a matter of becoming aware of these elements.

Lecturer: Elizabeth Jochum

Required Readings: Böhme, Gernot "Atmosphere as a Fundamental Concept of a New Aesthetics"

Berleant A. Berleant A. "Environemtnal Sensiblity" in Ambiances in Action

# 3<sup>rd</sup> Lecture "Phenomenology of Experience

This lecture introduces students to Merleau-Ponty's aesthetics and *Phenomenology of Perception*. Merleau-Ponty's notion of the lived body (more specifically "one's own body") as the primary site of knowing the world challenged the philosophical tradition of placing consciousness as the source of knowledge. His insight that the body and that which it perceives cannot be disentangled has profoundly impacted theories of perception and experience, and processes of art making.

Lecturer: Elizabeth Jochum

Required Readings: Merleau-Ponty "Phenomenology of Perception"

States, B. "The Phenomenological Attitude"

#### 4<sup>th</sup> Lecture "The Performative Turn: Performance, Art, and Installation

The performative turn is a paradigmatic shift in the humanities and social sciences that has influenced art making and art theory. This lecture considers the relationship between visual art and performance using Michael Fried's landmark 1974 essay "Art and Objecthood" as a point of departure. Fried criticizes the "theatricality" of minimalist art and argues that the focus on presence forces us to consider how the viewer's experience, rather than the relational properties of the work of art, is fundamental to meaning and interpretation. The tension Fried articulates between art and objecthood draws attention to the quality and conditions of reception and perception of the viewer,

which have implications for visual art as well as performance.

Lecturer: Elizabeth Jochum

Required Readings: Fried, Michael "Art and Objecthood"

Fischer-Lichte, E. "The Transformative Power of Performance", 2008.

Shklovsky, V. "Art as Technique", 1965.

5<sup>th</sup> Lecture "Sensorial and bodily perspectives on experience"

The concept of experience is a concept with a wide range of meanings. It can be about events that for a moment affect us as well as something we learn from and which forms us as person and constitutes our practical knowledge. Experience and aesthetics have a long history of mutual relation – the aesthetic product or event affect us in many ways, from giving pleasure or some emotional response to profoundly changing our understanding of an object or phenomena.

Lecturer: Elizabeth Jochum Required Readings Shusterman, R. *Pragmatist Aesthetics. Living Beauty, Rethinking Art.* http://www.fau.edu/humanitieschair/pdf/Somaesthetics A Disciplinary Proposal.pdf

Artaud, A. "Theatre of Cruelty.

6<sup>th</sup> Lecture "Phenomenology of the Virtual

Computer software and hardware, coupled with revolutions in animation and CGI programs have given rise to a special species of art and performance. Many of these works exist only in the virtual environments and have interactive components. Cyberart be produced programmatically by applying a set of design rules to a natural or preexisting process, enabling the program to produce a few million such "works of art" in a minute. This lecture explores features of cyber and virtual art and networked/cyber performance as experience, considering how these works of art function from both semiotic and phenomenological perspectives.

Lecturer: Elizabeth Jochum Required Readings Blau, H. "Virtually Yours: Presences, Liveness, Lessness", 2007.

Wilson-Smith, M. The Total Work of Art: From Bayreuth to Cyberspace,

# Examination

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

# Artistic and Academic Methodology VI (1,5 ECTS)

1, 2 and 3 Lesson

Practising Interdisciplinarity in the context of Art, Science and Technology

Lecturer: Betty Li Meldgaard

In the three lectures the focus will be on interdisciplinarity, design research/research design and how to work with problem statements based on real life situations.

1<sup>st</sup> Lecture: Interdisciplinarity

Five characteristics of interdisciplinary research methodology will be introduced and will form the basis of the three courses, where the fields; art, science, technology and experience are viewed

from different research positions. Required reading: Weingart & Stehr (ed.)(2000). "Practising Interdisciplinarity". Toronto. University of Toronto Press.

2<sup>nd</sup> Lecture: Getting the problem statement right – research design/design research

This course will work towards 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 experience, cultural and social aspects regarding artistically framed questions.

Required reading:

Vaus de, David, "Research design in social research", 2001, SAGE pub. Ltd. (in excepts 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 – <u>www.theprofessorisin/2015/01/20/dr-karens-</u> partial-rules-for-the-artists-statement

# 3<sup>rd</sup> Lecture:

The course finally ties the mentioned approaches together in a practical approach to choices of method by presenting and discussing several creative methods for experimentation, the planning of research design and working with artistic and obstacle based problems and questions.

Required reading:

Listed literature:

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

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

4<sup>th</sup> Lecture "Interdisciplinary Performance"

Lecturer: Elizabeth Jochum

Performance Studies is an emergent academic field that considers performance in any of its various forms. "Performance" includes artistic and aesthetic performances (concerts, theatrical events, and performance art) as well as sporting events, social, political and religious events, public discourse, and components of identity which require someone to do, rather than just be, something. This lecture introduces the field of performance studies as an interdisciplinary field, drawing from theories of the performing arts, art history, anthropology, sociology, literary theory, and legal studies, as a frame for contextualizing and theorizing contemporary works and the students' own art practice.

Required Readings: H.T. Lehmann "Performance: A Field in Between" (pdf) Marvin Carlson "What is Performance?" (pdf) Roselee Goldberg "Performance Art" (pdf) 5<sup>th</sup> Lecture: "Postdramatic Art"

Lecturer: Elizabeth Jochum

"Postdramatic" is an increasingly important notion since the publication of Hans-Thies Lehmann's *Postdramatic Theatre* (German 1999; English translation 2006). In theatre, the postdramatic emerged from a profound dissatisfaction with drama's two fundamental processes: the representation of the external world and the structuring of time. This lecture considers a wide range of contemporary theatrical forms, including devised work and live art by analyzing the relevant features of the postdramatic and how they have been applied by theatre, visual, and performance artists. We consider how the notion of the postdramatic has reconfigured and challenged the boundaries between visual art and performance.

In class, each group will research present on a postdramatic artist/performance/installation and uncover the artistic and theoretic methodologies that inform the practice.

# **Required Readings:**

Sections from Lehmann, H. Postdramatic Theatre "Aspects" (pdf) "Panorama" (pdf)

6<sup>th</sup> Lecture: "Re-Thinking Liveness"

Lecturer: Elizabeth Jochum

What does it mean for a performance to be live? What is the relationship between liveness and authenticity? In the digital age, technologies of reproduction alter our expectations, experiences, and methods of creating and evaluation interdisciplinary performances and interactive experiences. To what extent does the notion of liveness still matter?

# **Required Readings**:

Balme, Christopher. "Surrogate Stages: Theatre, Performance and the

Challenge of New Media." (pdf)

Phelan, Peggy. "The Ontology of Performance: Representation without Reproduction"

(In Unmarked) (AAU-Lib download).

Auslander, Philip. "Liveness. Performance and the anxiety of simulation" (pdf)

# Examination

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

# Performance Technology II (1 ECTS)

This course is taught in collaboration with Programming IV.

The two courses overlap in content and assignments, in order to complement one reinforce the core principles of the semester theme.

Contemporary performances (theatre, dance, music, opera) incorporate an increasing level of reproductive and interactive technologies. Emerging technologies for video projection and computer vision play a central role in these performances. More than merely static backdrops,

interactive projections expand the possibilities and boundaries for scenic design and live performance. In particular, the field of dance has embraced emerging technologies in novel ways. Dancers can performance in front of many cameras at once, appear on multiple screens, or be wired to capture motion. Dancers can appear instantaneously on screens all over the globe, rechoreograph motions, or map their bodies into any simulated environment. 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.

# Objectives

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

To develop approaches to interface and system design for real-time and recorded video and performance

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

# Features:

- Workshop Oriented
- Three Topics: Tracking, Mapping, and Rendering
- Special focus on dance, kinesics, kinaesthetics, video, motion capture,
- Aesthetic and theoretical topics alongside case studies will be explored in Performance Technology II; programming, methods, and tools to combine video projection with computer vision tools in live performances (OpenCV, Processing, Kinect, etc.).

# Lesson 1: "Kinesics and Kinesthetics I"

# Lecturer: Elizabeth Jochum

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 will look at examples from modern and 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*.

# **Required 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 II"

Lecturer: Elizabeth Jochum

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.

# **Required Reading**:

"Keeping Research in Tune with Practice" Andrew Johnston (in Interactive Experience in the Digital

# Age).

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

Lesson 3: "Bodies on Stage: Acting and Dance Confronted by Technology"

Lecturer: Elizabeth Jochum

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. We explore the need to redefine the nature of the actor and subject, both in performance and "real life."

# **Required Readings:**

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

How we became posthuman: virtual bodies in cybernetics, literature, and informatics by N. Katherine Hayles. (pdf)

Lesson 4: "Dancers, Puppets, and Robots"

Lecturer: Elizabeth Jochum

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". (pdf)

"Control and Art" (multiple authors), Springer (pdf)

# 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)

# **Course Description**

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

# Lessons

# (1) Image Processing

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

Lecturer: Lance Putnam

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/

# (2) Video Capture

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

Lecturer: Lance Putnam

# (3) Optical Flow

Estimation of apparent motion in visual scenes using optical flow.

Lecturer: Lance Putnam

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=JILkkom6tWw

# (4) Blob Detection

Identifying regions of similarity using blob detection.

Lecturer: Lance Putnam

Reference:

http://docs.opencv.org/modules/features2d/doc/common\_interfaces\_of\_feature\_detectors.html#sim pleblobdetector

Further study:

"Blob Detection", http://www.labbookpages.co.uk/software/imgProc/blobDetection.html

"ACCESS - an interactive art installation by Marie Sester", https://www.youtube.com/watch?v=678EaXPekFo

Programming IV is part of the main module and will be evaluated through the semester project

# Module 29 - Art & Technology Entrepreneurship (3 ECTS projects + 2 ECTS course) 5 ECTS

Oplevelsesteknologi og entreprenørskab (5 ECTS)

Activity Code HSA660028D

# Location

6<sup>th</sup> semester

#### Module coordinator

Betty Li Meldgaard

# 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 artefacts

#### Academic content and conjunction with other modules/semesters

The module consist of two parts: A workshop (Entrepreneurship) and 2 lectures (Strategic Communication)

1) Entrepreneurship/ Claus Rosenstand and Martin Miehe-Renard.

This part of the course will be 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.

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, and creation cycle will be presented and discussed.

Literature: TBA

# 2) Communication Strategies - Cross-media / Betty Li Meldgaard

# Lectures 1 and 2

Strategic communication in the digital age requires flexible strategies in relation to cross-media advertising and communication across platforms. The lectures will focus on the combined use of materials for communication from print to social media and evaluate the various strategies in relation to multimodal communication, cross-platform strategies (pros and cons) and work towards a practical synthesis of "getting the communication right".

Literature: TBA

# The module is completed with:

# Examination 21

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

Substitution: the examination form c) 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. If students do not pass on the attendance requirement a written assignment will be given based on a case and texts for analysis.

# Lecturer:

Betty Li Meldgaard

# Workshop holders:

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.

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.

# Prerequisites for participation

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

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

Play and Event (Valgfag) 5 ECTS

Activity Code: HSAVB0031D

#### Location

6<sup>th</sup> semester

#### Module coordinator

Betty Li Meldgaard

Ståle Stenslie

#### 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

The module is completed with:

# **Examination 20**

An internal written examination in Module 20 "Play and Event (Elective)".

Form of examination: c)

The examination is a free assignment, which is evaluated by one examiner and awarded a pass/fail grade.

For the examination, students are required to produce a play-based artefact or event and hand-in 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.

#### 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 cocreation 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

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 endeavor 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

# 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         |  |  |
|-----------------------------|--|--|
| Secretary:                  | Anne Nielsen   |  |
| Responsible<br>Coordinator: | Betty Li Malvang Meldgaard   |  |
| Lecturers:                  | Ståle Stenslie   |  |
| Purpose and goals:          | The course explores mobile technologies through a practice based approach.<br>The students will create augmented reality (AR) applications involving interactive<br>images, video and sound. The learning goals are to acquire a basic<br>understanding of AR, its applications, tools & approaches. Students will get<br>knowledge and hands-on skills on how to construct AR projects and how to<br>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<br>Guide to AR. Elsevier.<br><u>http://www.aurasma.com</u> , www.buildar.com                       |

| Title 2:     | 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 despite its virtual content. |
| Assignments: | Present your prototype AR application/concept to class  |

| Literature: | Kipper G., Rampolla J.(2012) Augmented Reality: An Emerging Technologies Guide to AR. Elsevier. |
|-------------|---|
| Literature: |   |