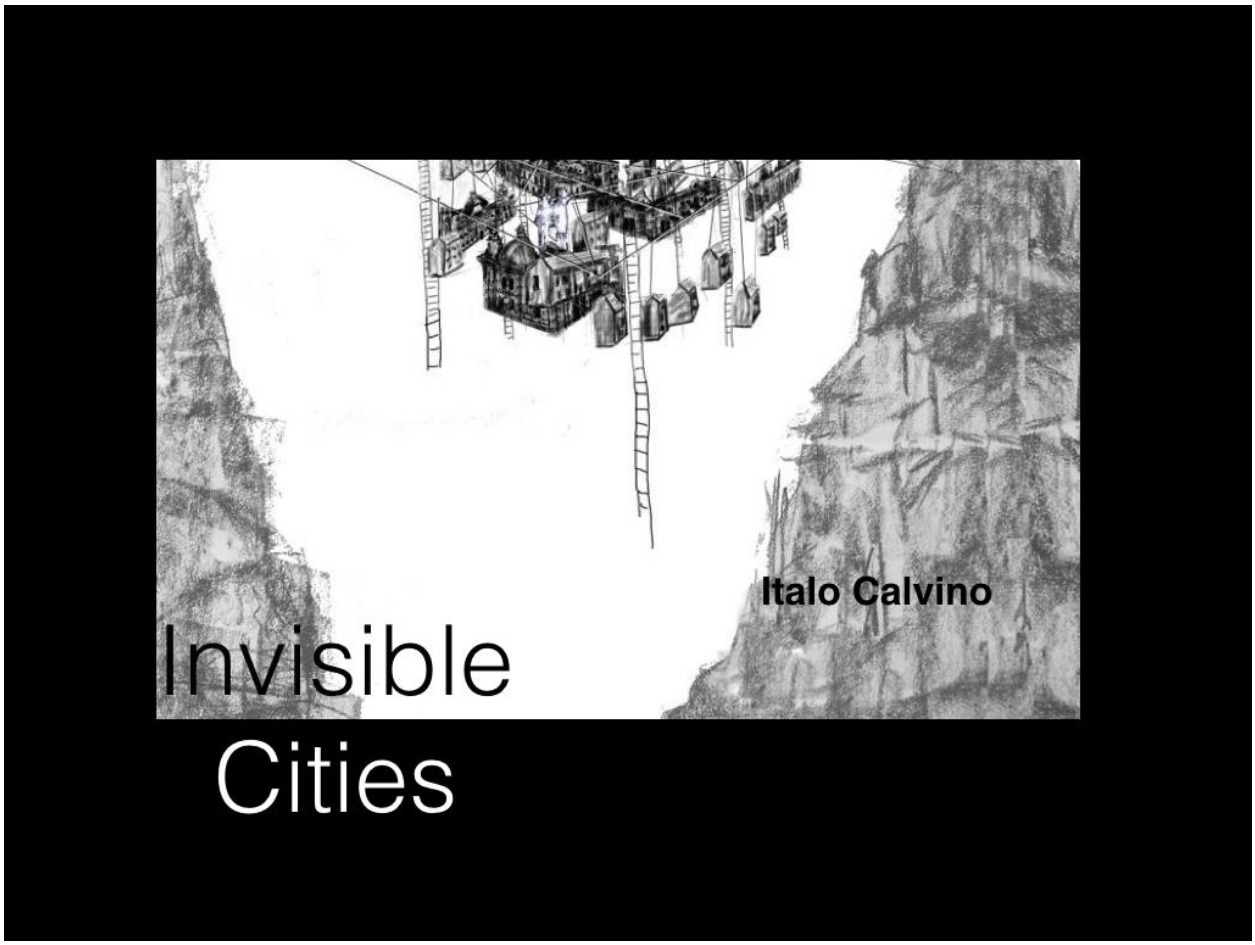
AALBORG UNIVERSITY
DENMARK

Study Board of
Art & Technology
Fall 2016

Art and Technology, AAU, 5th semester 2016
Narratives and Interaction / Narration og interaktion



Semester details:

School	CAT
Study board	ArT & Technology
Study regulation	BA Study Program in Art & Technology, The Faculty of Humanities, AAU, September 2014.

The semester introduces the production and creation of narrative artefacts and universes with special emphasis on the integration of interactive narratives and physical stages. Understanding the logic that shapes the narrative aspects of culture production and artefacts is essential for designing compelling and interactive user experiences. The modules are informed by theoretical and practical courses and seminars concerning concept development for new media including interactive cinema, video editing, scripting, screenings, workshops and discussion. The semester projects provide opportunities to establish collaborative processes and projects with external partners and the city of Aalborg.

Overview of the modules

The semester consists of 4 modules:

Module 15: *Narratives and Interaction*, (15 ECTS). The module comprises the semester-project and the following courses supporting the semester-project (10 ECTS):

1. *Artistic and Academic Methodology V* (Participatory Methods). Course Coordinator Ståle Stenslie. (1 ECTS). Lectures and workshops. (Integration of the courses on Artistic and Academic Methodology and Manuscript).
2. *Narrativity, Dramaturgy and Media 1*: Narrative theories from literature, film, performance and new media. Course coordinator: Elizabeth Jochum (2 ECTS). Lectures, workshops and in-course assignments.
3. *Manuscript I*: Storyboards, playwrighting and authoring performance scores. Course Coordinator: Elizabeth Jochum (1 ECTS).
4. *Video Editing*: Video Camera, Projection and Live Performance. Course coordinator: Elizabeth Jochum. Lecturer: Thomas Busk. (1 ECTS)

Module 16: *Mixed Reality Technologies* (5 ECTS). Focuses on the technology needed to do your semester-projects. The module comprises the following courses:

1. Programming Multimedia Systems. Course coordinator: Palle Dahlstedt. Lecturers: Palle Dahlstedt. (2 ECTS).

Module 17: *Art-Based Research* (5 ECTS) is about concept development strategies and practice-based research. The module comprises the following courses:

1. Art-Based Research: Theory and Practice. Course coordinator: Ståle Stenslie. Lecturers: Ståle Stenslie, Maria Cuevas. (2 ECTS).

Module 18 (Elective): *Multimedia Programming* (5 ECTS). The module comprises the following courses:

1. Multimedia Programming in Autonomous Art. Course coordinator: Lance Putnam. Lecturers: Lance Putnam, Elizabeth Jochum. (2 ECTS).

OR

You can attend course(s) offered by other study programs. Both you will need to sign up for (contact the study counselors or Anne Nielsen for further information).

Narratives and Interaction / Narration og interaktion

Semester Theme (2016):

Intermedia Performance

This semester will focus on narratives and interaction through intermedia performance. Students will design interactive performance spaces and compose a performance score to adapts Italo Calvino's novel *Invisible Cities* for live performance. The semester project lies at the intersection of cinema, digital media, dramaturgy, dance and performance.

All students will participate in the creative and practical development of a live, intermedia performance. The performance will be open to the public and is scheduled for

December 1, 2, and 3rd 2016 in TRANSFORMATOR THEATRE (Aalborg Theatre).

The external collaboration will be supervised by Elizabeth Jochum with mentorship from Hans Henriksen, artistic director of Aalborg Theatre. Working in groups, students will combine narrative, film, and interactive technologies to design responsive/interactive narrative universes and physical spaces for live performance. Teaching is organized in relevant workshops and related courses aimed at supporting project work. In addition to their individual contributions to group projects, all students will be assigned a role in the Production Team for the performance. Participation in the live event (including the production and technical rehearsals prior to the performance) is required for successful completion of the semester.

During the semester, students will learn theories, histories and practices of interactivity and narrativity in performance and new media. Students will be introduced to different technologies and artistic methods, including prototyping performance technologies, wearable technologies, augmented reality and basic principles of stage design including lighting, sound, and projection. Students will learn to analyze, discuss and apply aesthetic theories and methodologies such as intermediality, performance technology and postdramatic theatre in relation to live performance.

Semester coordinator and secretariat assistance:

Semester coordinator:
Elizabeth Jochum, KOM
jochum@hum.aau.dk
+45 52 23 09 02

Secretariat:
Anne Nielsen, KOM
amn@hum.aau.dk
+45 9940 9919

Supervisors:
Elizabeth Jochum, KOM
jochum@hum.aau.dk
+45 52 23 09 02

Overview of the modules

Module 15: Narratives and Interaction
(15 ECTS)

- Artistic and Academic Methodology V (Participatory Methods)
- Dramaturgy and Media I
- Manuscript I
- Video Editing

Supervisors:
Elizabeth Jochum

Teaching staff:
Elizabeth Jochum, KOM
Falk Heinrich, KOM
Ståle Stenslie, KOM
Thomas T. Busk, KOM MediaLab

Module 16: Mixed Reality Technologies
(5 ECTS)

- Programming Multimedia Systems

Supervisors:
Palle Dahlstedt, KOM
dahlstedt@hum.aau.dk
+45 20702102

Teaching staff:
Palle Dahlstedt, KOM

Module 17: ArT-Based Research (5 ECTS)

- Art-Based Research – theory and practice

Supervisors:
Ståle Stenslie, KOM
stenslie@hum.aau.dk
+47 9056 2963

Teaching staff:
Ståle Stenslie, KOM

Module 18: Multimedia Programming (Elective)
(5 ECTS)

- Multimedia Programming

Supervisors:
Markus Löchtefeld, MT
mloc@create.aau.dk
+45 9356 2170

Teaching staff:
Markus Löchtefeld, MT, Elizabeth Jochum, KOM

Departments:

KOM

Department of Communication and Psychology

AD

Department of Architecture, Design and Mediatechnology (Architecture and Design)

MT

Department of Architecture, Design and Mediatechnology (Mediatechnology)

BYG

Department of Civil Engineering

Module 15: Narratives and Interaction (Narration og interaction)

(15 ECTS)

HSA550027F

Location:

ArT5

Study Board:

ArT & Technology

Module coordinator:

Elizabeth Jochum, KOM
jochum@hum.aau.dk
+45 52 23 09 02

Method of work and language:

Project work in groups.
English

Module contents:

The module introduces the production and creation of narrative artefacts and narrative universes with special emphasis on the integration of interactive narratives and physical stages. The module is supported by theoretical and practical courses and seminars within concept development of narratives installations of various kinds, video editing, scripting, and possibly special ad hoc activities evolving from the production processes of the students. Furthermore, the module seeks to establish collaborative processes and projects with external partners.

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

- Artistic and Academic Methodology V (Participatory Methods)
- Dramaturgy and Media I
- Video Editing
- Manuscript

Objectives

The objective of Module 6: “Narratives and Interaction” is to introduce the students to problem areas and solutions in relation to the creation of artefacts and projects, in which different forms of structuring of narrative information plays a major role, i.e. interactive storytelling, collaborative narrative projects, hypertexts etc. The module comprises of theoretical and practical courses and seminars within narratology, (interactive) dramaturgy, understanding and creation of fictional universes, writing of manuscripts and storyboards.

Learning objectives:

During this module, students should acquire:

Basic **knowledge** about

- central theories within narratology with special focus on narratives in interactive settings

- methods for the creation of narrative installations
- central theories within (inter/re-active) dramaturgy and performance design
- theories and methods of combining physical and digitally enhanced spaces
- artistic and technological strategies within performance design and performative events
- manuscripts and storyboards as central creation methods of narrative media installations
- artistic and academic methods of collaborations with external partners

Skills in

- identifying and formulating an artistic problem and/or theme within the field "Narratives and Interaction" and developing different artistic solutions (concepts) for a chosen problem/theme
- transforming basic knowledge and theories of narrativity and media technology into valid artistic concepts
- identifying dramaturgical challenges within interactive fiction and performance
- applying and implementing (interactive) dramaturgical models that combine physical and digitally enhanced spaces
- applying technological solutions in regard to interactive narratives and performance design

Competencies in

- conceiving ideas and developing concepts of (interactive) narrative artefacts that combines physical and digital means of expression
- analyzing and constructing narrative artefacts and events that merge virtual and material spaces
- employing a number of digital performance technologies
- analyzing and creating manuscripts and storyboards in regard to re-/interactive story telling
- Contextualizing own artistic solutions (to state-of-art, socio-cultural requisites and consequences, art theoretical and aesthetic dimensions, etc.)
- describing, analyzing, and documenting artistic design solutions on a professional level, and communicating this to external collaborative partners

The module is completed with:

Examination 15

An internal combined written and oral examination in **Module 15 "Narratives and Interaction".**

The examination will take the form of a conversation between the student, the examiner and another internal 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 aggregate grade is awarded for the artefact, the written and oral performances.

The assessment results in an individual grade.

Credits: 15 ECTS

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

The dates for the oral evaluation are Week 3, January 12th to 22nd 2016.

Exam dates:	The dates for the oral evaluation are Week 3, January 16th to 20th 2017.
Exhibition dates:	Nov 30, Dec 1 at 19h, Dec 2 at 19h, Dec 3 at 16h
Deadline:	
Hand-in date:	December 22nd, 2016 at 10 am
To:	Through Digital Exam

Scope and expectations:

Semester Theme:

Intermedia Performance

This semester will focus on narratives and interaction in intermedia performance. Students will develop new approaches for designing interactive performance spaces and working with live performers to restructure the performer and the viewer's experience. The semester project lies at the intersection of cinema, digital media, dramaturgy, dance and performance.

All students will participate in the creative and practical development of a live, intermedia performance. The performance will be open to the public and is scheduled for

December 1 at 19h, December 2 at 19h and December 3rd at 16h 2016.

This LIVE PERFORMANCE IS THE FINAL EXHIBITION FOR ArT5.

Attendance and Participation is Mandatory.

Semester Deliverables:

Working in small groups (no more than 5 members to a group) you will design a narrative and an interactive performance, including a performance score based on a section from Italo Calvino's novel *Invisible Cities*. This performance will be created in the following stages: 1) DEVELOPMENT, 2) PITCH and 3) REALIZATION. There will be a chance to re-form groups or re-evaluate the design concepts following the development workshops based on feedback from the external collaborators and supervisors. Feedback will include technical feasibility, as well as aesthetic and thematic considerations. Groups are free to employ any variety or combination of media but they MUST meet all of the following criteria:

1. Narrative (this should be adapted from Italo Calvino's *Invisible Cities*).

2. Interactive dramaturgy or interactive technology. (This may include the use of contact microphones on the stage, on dancers, EKG or electrocardiographic sensors or other bio-inspired sensors, haptic devices, motion tracking using the Kinect or other cameras/sensors, touch-technologies, video or projection mapping. The interactive component can be designed for the dancers, musicians, technical operators, the audience or any combination of these).

3. Film (Minimum three-minutes, may be longer) (original footage or animation, not only “recycled” or found footage. This may include real-time or live-generated video based on cameras or sensor data, green screen technology, etc).

Semester Reports:

This semester, students will be divided into groups of three to five students and each group will work on a single project with the goal of creating a live performance to be included in the end-of-semester exhibition. The project reports will present your research in a particular area of investigation. They should clearly present the motivation, design, implementation, and analysis of the artwork.

Report Guideline:

All reports should adhere to the following format:

ABSTRACT

A short paragraph summarizing the main aspects of the investigation---context, problem, results, and insights.

INTRODUCTION

This is where you set the context for your work. What is the motivation for investigating this area?

PROBLEM STATEMENT

Here you concisely state what the problem is you are investigating. You may also present a hypothesis to be supported or rejected through your own experiments.

REVIEW OF THE LITERATURE

Here you introduce all relevant theories and methods that demonstrate your knowledge of the field of intermedia performance, performance technology, narrative theory and interactive dramaturgy. You are encouraged to draw on the course literature for use in the reports. Always reference refutable sources (i.e., peer-reviewed journals, books, etc.) and, when possible, primary sources (i.e., the original author of the work) to avoid misinformation. Google and Wikipedia are okay only as starting points.

BACKGROUND

This should contain previous, relevant work in the area you are investigating. You should clearly identify antecedents and point out both the importance of each in relation to your own work. Make clear what your own unique intervention, or contribution, to the field of intermedia performance is.

DESIGN

Here is where you outline your process of creation and the decisions you made along the way. Elaborate on and justify your artistic, aesthetic, and technical choices. Describe your experiment design.

IMPLEMENTATION

How was the final work constructed? Include overall system diagrams and exhibition arrangement. Detail the most important aspects of the implementation and place the rest in the appendix. One should be able to fully and unambiguously re-create your artwork based on the information in this section.

COLLABORATION

Describe what you learned from the collaboration with the external partners and your fellow groups. Do not summarize, but reflect on key learning outcomes: What were your initial assumptions about intermedia performance at the start of the semester? How did these assumptions shift based on your

experience? What challenges did you face when working in a performance context? Include a discussion of your role and involvement as a member of the production team. This should be independent from the discussion of your individual creative contribution and address your involvement with the production process *as a whole*.

ANALYSIS

Was your work successful? Support this with arguments, evidence, or experimental data. If you made an initial hypothesis, do the outcomes (the performance, the audience reaction, and your observations, or any experimental data) support or reject it?

FUTURE WORK

Is there anything you could have done better? How? If you were to develop this project further, what would you work on next?

CONCLUSION

This is where you bring it all together. The conclusion is NOT simply a summary of what you have done. You should connect all the dots and synthesize new insights here. What can others learn from this?

BIBLIOGRAPHY

List of references following the Harvard referencing style.

APPENDIX

Include all data produced during your investigation. This can include sketches, scenic design, performance scores, experimentation/observation logs, transcriptions of interviews, survey data, source code, etc. Note that the main text can reference the information in this section.

All figures, tables, and images in the report must be labelled with a brief description and cited in the main text. You are also required to make a video documentation of the final artefact and submit it with the report.

Video and any other relevant digital media (e.g., images, sounds) should be submitted with the report.

All material in the report that is not the original creation of the students in the group must be properly acknowledged by using the Harvard referencing style. Failure to do this will be considered plagiarism and will lead to immediate failure and possibly also to expulsion from the program.

All exams will be submitted using AAU Digital Exam, and subject to a plagiarism detection scan using software that produces an originality score for your report.

Prerequisites for participation:

Course: Artistic and Academic Methodology V: Participatory Methods

(1 ECTS)

The purpose of the course is to introduce the student to theories and methods of conceptualizing, preparing and writing narratives and interactive content relevant for the semester theme. The course is made as a two day workshop. It takes a practice-based approach towards realizing an interactive art installation and/or concept.

Lesson 1: AAM-1: Introduction to Interactivity and its Methods

Lecture

AAM-1: Introduction to Interactivity and its Methods – How to Conceptualize, Textualize and Implement Your Work of ArT.

How do we engage users through Art and Technology? How to use digital media and interactive storytelling to better engage users? The lecture will focus on interactive works of art and how they engage users through interactivity. But how do we define interactivity? And how to apply interactive Augmented Reality as a method to create better users experiences, not just more complicated ones? An overview of different approaches of how ArT works are implemented will be given.

Lecturer(s): Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Heim, Michael (1998) *Virtual Realism*. Oxford University Press.	x		
Hauser, Jens (2008) *Sk-Interfaces*. Liverpool University Press.	x		
Isaacs, Julian. *Psycho-technology: Its Present & Future*. http://www.mindmodulations.com/resources/General-psychotech.html accessed August 2013	x		
Svanæs, Dag (2000) Understanding interactivity: steps to a phenomenology of human-computer interaction. Ph.D. dissertation, NTNU, Norway. http://www.idi.ntnu.no/~dags/interactivity.pdf accessed August 2013.	x		
Stenslie, S. *Virtual Touch*. 2010. Page 232, section: 6.3.2.	x		
Grau, Oliver (2003) Virtual Art – From Illusion to Immersion. The MIT Press.	x		

Lesson 2: AAM-2: AUGMENTED IMMERSION

Lecture

What is immersion and how do we use it to create encompassing, even holistic user experiences? The lecture will present and discuss some historical pieces, starting with media archeological approaches, presenting the historical field of Virtual Reality onwards to contemporary means of creating Mixed and Augmented Realities. Basic technologies and techniques of making AR experiences will be introduced. All students are asked to bring their own Smartphone.

Assignment: Present one example of immersive art from Grau's book, or an Augmented Reality piece by your choice. Length: max 1. Page.

Lecturer: Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Benford, Steve & Giannachi, Gabriella (2011) Performing Mixed Reality. MIT Press.	x		

Lesson 3: AAM-3: CONCEPT: AUGMENTING YOUR STORY

Lecture and Workshop

The lecture will be held as a workshop where the various groups develop a concept with a storyboard for presentation and discussion in class.

Assignment: GroupWise prepare a storyboard with a technique of your choice. Present and discuss in class.

Assignment: realize your storyboard project and document it

Lecturer: Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Slides and other resources

Lesson 4: AAM-4: Final Presentation

Workshop

Each group will present their final AR work in class for discussion and critique.

Lecturer: Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Course: Narrativity, Dramaturgy and Media I

(3 ECTS)

Lesson 1: NDMI-1 Narrative Theory from the *Poetics to New Media*

Lecture and in-class exercises

This course introduces students to the theory and study of narrative and narrative structure. Special focus will be given to literary theory and how these concepts translate to film theory and visual art theory, and how they influence dramaturgies across different fields and media.

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Invisible Cities (Italo Calvino)	172		yes
Narrative Across Media (Marie-Laure Ryan) Introduction	40		yes
Poetics (Aristotle)	40		yes

Lesson 2: NDMI- 2 Workshop: Dramaturgy and Performance

Workshop

Students will learn methods in research, playwriting, and creative dramaturgy for conceptualizing and staging devised works for the stage and intermedia performance. Special focus will be given to understanding how adaptation/staging of narratives. Prior to the workshop, there will be a tour of the

Aalborg Transformator Theatre. Workshop will be lead in collaboration with resident dramaturg at Aalborg Theatre.

Lecturer(s): Elizabeth Jochum and Jens Christian Lauenstein Led

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Hero With a Thousand Faces (Joseph Campbell)	40		yes
Cambridge Intro to Theatre Studies (Ch 12 Theatre & Media) (C. Balme)	25		yes
Digital Performance (Ch 4 MultiMedia Theatre) (Steve Dixon)	20		yes

Lesson 3: Workshop: Adaptation and Devised Performance

Workshop

Students will learn methods in creative techniques for conceptualizing and staging devised work for the stage and intermedia performance. Special focus will be given to understanding how directors work with playwrights, designers, and actors to adapt literary works for the stage. Workshop will be lead in collaboration with artistic director of Aalborg Theatre.

Lecturer(s): Elizabeth Jochum and Hans Henriksen

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Digital Performance (CH 5: Performance Tech since 1960) (Steve Dixon)	28		yes
Postdramatic Theatre (Hans-Thies Lehmann) (Theatre & Perf; Aspects)	36		yes
Performance and New Media (Sarah Bay Cheng)	25		yes

Lesson 4: **NDMI 4: *Postdramatic Theatre and*** *Performance*

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Digital Performance (Ch 23:Peforming Interactivity) (Steve Dixon)	39		
Surrogate Stages: Theatre, Performance and the Challenge of New Media (Balme)	13		
Postdramatic Theatre (Hans-Thies Lehmann) (Panorama)	35		

Lesson 5: NDMI-5: Interactivity and Dramaturgy

Lecture

The lecture introduces, firstly, relevant notions of interaction and interactivity, secondly, various dramaturgical models of interactive narratives and, thirdly, work methods such as pitch, manuscript and storyboarding relevant for interactive narratives.

Lecturer(s): Falk Heinrich

Assignment:

Each group has to prepare and present at the following lecture (no 6) a pitch document that conveys the group's idea of an interactive narrative of your choosing.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Ryan, Marie-Laure, 2001. *Narrative as Virtual Reality.* Baltimore: John Hopkins University Press (chapter 3, 7, 8) (available as e-book via Auboline)	x		
Manovich, Lev, 2001. *Language of New Media.* Cambridge MA: MIT Press (p 226ff)		x	
Ryan, Marie-Laure, 2008. "Interactive Narratives, Plot Types and Interpersonal Relations", ICIDS '08 Proceedings of the 1st Joint International Conference on Interactive Digital Storytelling: Interactive Storytelling		x	

Lesson 6: NDMI 6: Interactive narratives

Lecture

Interactive narratives: a) productive interactivity and b) pitch, manuscript and storyboarding

The lecture introduces the concept of productive interactivity as a second artistic and academic perspective on interactive narratives. It discusses the theoretical assumptions and practical challenges. The second half is a student presentation of their pitch document. On the basis of the specific story world ideas, the groups will produce, present and discuss pitch documents, manuscripts and storyboards.

Lecturer(s): Falk Heinrich

Exercise: The student groups have to prepare a pitch documents prior to the workshop and present it at the workshop. During the workshop, the students will work with manuscript and storyboarding relevant for their project.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Crawford, Chris, 2005 *On interactive storytelling.* Berkeley: New Reader Games (chapter 3)	x		
Katz, S. 1991. *Shot by Shot.* Studio City, CA: Michael Wiese Productions	x		
Begleiter, Marcie. 2001. From word to image. Studio City, CA: Michael Wiese Productions		x	
Bruce Block, 2001. *The visual story*. Focal Press		x	

Lesson 7: NDMI-7: The Stage as Machine.

Lecture

This course considers approaches to narrative in film. We examine how filmmakers used the new medium to create alternative narrative structures through experimentation and exploration. What do these structures reveal about the nature of perception, and how does the filmic medium shape the production and interpretation of meaning in other areas of visual culture? In-class student presentations on relevant artists (10 minutes, including slides, video, audio, one-page written summary).

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Theatre, Performance & Technology (CH 1, 3, 5, 8) (Christopher Baugh)	80		yes
Cambridge Introduction to Theatre Studies (Ch 3: Spaces and Places)	20		yes

(Christopher Balme)			

Required viewing:

Lesson 8: NDMI 8: Virtual Performance from Bayreuth to Cyberspace
Workshop

On the basis of the student groups' specific story world ideas, the groups will produce, present and discuss pitch documents, manuscripts and storyboards.

Exercise: The student groups have to prepare a pitch documents prior to the workshop and present it at the workshop. During the workshop, the students will work with manuscript and storyboarding techniques relevant to their projects.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Live and Technologically Mediated Performance (Philip Auslander)	14		yes
*From Bayreuth to Cyberspace (*Matt Wilson Smith*)*	17		yes
*Virtually Yours: Presence, Liveness, Lessness (*Herbert Blau)	16		yes
Live art in art history: a paradox? (Amalia Jones)	14		yes

Course: Video Editing

(1 ECTS)

First part: Introduction to camera use, with the intent to be able to handle and choose the right equipment for the task, be it documentation or integration in the semester project. The Students will also be Introduced to using light, both natural and artificial.

Second part: Introduction to the video editing software Avid Media Composer, resulting in the student being able to edit the material recorded on the camera equipment supplied by Medialab, be it for documentation purposes, or integration in the semester project.

Lesson 1: VE-1: Introduction to the camera
Workshop

Lecturer(s): Thomas T. Busk

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Lesson 2: VE-2: Film lighting
Workshop

Lecturer(s): Thomas T. Busk

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Lesson 3: VE-3: Live Projections and Performance
Workshop

Lecturer(s): Thomas T. Busk

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Avid Media Composer 6.5 vejledning AAU 2014	?		

Lesson 4: VE-4: Live Projections and Performance

Workshop

Lecturer(s): Thomas T. Busk

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Course: Manuscript

(1 ECTS)

This course introduces students to the act of dramatic writing and narrative with a particular focus on writing and adaptation for the stage. Students will engage in short writing execises based on the semester project, and learn to identify and apply core concepts in dramatic writing including: character, conflict, crisis, climax, and resolution. Concepts such as diegetic and mimetic narrative will be discussed in the context of dialogue and staging. Creative approaches based on improvisation, including movement and choreographic scores, will be considered. We will also discuss the different approaches to manuscript, performance score, and playwriting in different traditions where there is no traditional of literary analysis for texts. How do artists record and devise manuscript in the absence of a literary text? What does a manuscript for a performance look like?

Lesson 1: Basics of Dramatic Writing

Date: 30 September 9:30am-12h

This lecture and workshop provides and in-depth discussion the tenets of dramatic writing and epic poetry. We begin by exploring how the core of narrative theory is applied in classical playwrighting. Exercise will include dialogue, short plays, and performance sketches. We will also discuss the different approaches to manuscript, performance score, and playwriting in different traditions where there is no traditional of literary analysis for texts. How do artists record and devise works in the absence of a literary text? What does a manuscript for a performance look like?

LOCATION:

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Playwriting (Smiley, S and Bent, N)	75		yes
Poetics (Aristotle)	40		yes
Natysastra (Bharata)	40		yes

Lesson 2: Experiments in Dialogue and Structure

This lesson builds on the first lesson and introduces more abstract and complex approaches to dramatic writing. Working with the text *Invisible Cities*, we will devise dialogue based on the scenes and passages from the text, and experiment with dialogue and dramatic structure. Emphasis will be placed on experimental approaches to playwriting and manuscipt development.

Date: 7 October 10:15h-12h

LOCATION:

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
The Art of Dramatic Writing (Egri, Lgos)	30		yes
Sure Thing (David Ives)	30		

Lesson 3: Performance and Manuscript

This hands-on workshop focuses on developing and devising manuscript through improvisation, dance, and peformance. Specifically we will work with physical and vocal improvisations to experiment with manuscripts for Invisible Cities. Students will come up with their own methods for visualizing and documenting performance narratives. If the script is only a blueprint for performance: how can we use structured improvisation to develop layered blueprints for intermedia performance?

Date: 13 October 10:15h – 12h

LOCATION: TBA

Lecturer(s): Elizabeth Jochum and Sandro Masai

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
TBA			

Lesson 4: Performance and Manuscript

This hands-on workshop focuses on developing and devising manuscript through improvisation, dance, and peformance. Specifically we will work with physical and vocal improvisations to experiment with manuscripts for *Invisible Cities*. Students will come up with their own methods for visualizing and documenting performance narratives. If the script is only a blueprint for performance: how can we use structured improvisation to develop layered blueprints for intermedia performance?

Date: Date: 13 October 13:30h – 15:15h

LOCATION: TBA

Lecturer(s): Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
TBA			

Module 16: Mixed Reality Technologies (Mixed reality teknologi)

(5ECTS)

HSA550028F

Location:

ArT5

Study Board:
ArT & Technology

Module coordinator:
Palle Dahlstedt, KOM
dahlstedt@hum.aau.dk

Method of work and language:

Individual or small groups.
English

Module contents:

The module is comprised of theoretical and practical courses and seminars within technologies for construction of performative environments or installations

Objectives

The objective of Module 16 “Technologies for performative environments and installations” is to introduce the students to theories and methods of technologies in relation to the creation of interactive or re-active narratives and performances that merge virtual and material spaces.

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

- Performance Technology I
- Programming Multimedia Systems

Learning objectives:

During this module, students should acquire:

Basic **knowledge** about

- basic theories and methods for fiducial recognition and tracking
- basic theories and methods for natural object recognition and tracking
- basic theories and methods for development of augmented and virtual reality systems
- basic theories and methods for human motion capture and tracking
- mapping between real and virtual world environments
- methods for measurement of experiences and presence in different environments

Skills in

- applying methods for development of augmented, mixed and virtual environment
- applying methods for tracking of fiducial and natural objects
- applying methods for automated analysis and recognition of human motion

- analysis of mapping between real, augmented, mixed or virtual reality environments
- analysis of user experiences and presence in augmented, mixed or virtual reality environments

Competencies in

- analysing and constructing augmented, mixed and virtual environment
- analysing and constructing human motion capture systems
- analysing and constructing systems that map information between real, augmented, mixed or virtual reality environments

The module is completed with:

Examination 16

An internal written examination in **Module 16: "Mixed Reality Technologies"**

Form of examination: c)

The assignment is evaluated by one examiner and awarded a pass/fail grade.

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

Evaluation: pass/fail. In case of a Fail grade, also a second examiner will 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.

Exam dates:	In-class assignments and active participation (see above).
Exhibition dates:	
Deadline:	
Hand-in date:	
To:	

Scope and expectations:

The project for this module is expected to comprise a small report and an artistic product. This product may be part of the semester's main product. Both the report and the product are to be made in a group. In the event that the main semester project is used as case for this module, then this group should be identical to the main semester project group.

The project should address all relevant aspects taught in this module, i.e. the technologies used, how it fits within the different definitions of mixed reality, how it is implemented, and how it will be evaluated.

Participants:

Prerequisites for participation:

Course: Performance Technology I

(2 ECTS)

This series of lectures and workshops will teach how to use mixed media technologies in an interactive performance situation, tightly integrated with the semester project. The course is based around two free graphical programming environments, vvvv (https://vvvv.org/) and Pure Data (often called PD, https://puredata.info/), which are commonly used in interactive art, music and performance applications. Both PD and vvvv can be used for audio and visuals, but we will concentrate on their stongest areas, which are interactive visuals in vvvv and audio in PD.

The module will be taught hands-on, so you are expected to bring a laptop to every lecture and use it in the classroom.

Before the course, install vvvv and PD from the above websites. PD is multiplatform, while vvvv is for Windows only. If you have a Mac, you can still run it under Windows on it. Read here for instructions: https://vvvv.org/documentation/best-practices-when-using-bootcamp

Lesson 1: Introduction to Performance Technology and Dataflow Programming

Lecture/workshop with active participation

Models of interaction in performance. Introduction to tools and techniques. Discussion of examples.

Date and time: Sept 26, 15.15-17.00

Lecturer: Palle Dahlstedt, KOM

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
https://en.wikipedia.org/wiki/Pure_Datahttps://en.wikipedia.org/wiki/Pure_Data	x		X
Excerpt from “Designing Sound” by Andy Farnell – a good introductory book on PD http://dm.ncl.ac.uk/courseblog/files/2011/02/pd_intro.pdfhttp://dm.ncl.ac.uk/courseblog/files/2011/02/pd_intro.pdf	x		X
The PD manual and the tutorials that come pre-installed with PD (see Help-Help Browser-Pure Data inside the PD window).	x		X
Scott deLahunta - Virtual Reality and Performance File			X
			X

Lesson 2+3: Introduction to vvvv programming

Lecture/workshop with active participation

Basic concepts. Interactive visuals, 2D and 3D. Motion sensing. Integration of video and audio.

An exercise using the acquired skills will be given, to be carried out in the semester project groups. It should be presented in a five-minute presentation at lecture 4.

Date and time: Sept 27, 9.15-13.00

Lecturer: Palle Dahlstedt

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
The official documentation for the vvvv programming environment at https://vvvv.org/documentation/documentation	x		X
Illustrated guide to VVVV https://vvvv.org/contribution/illustrated-guide-to-vvvv-for-newbies-in-computer-arts	x		X

Lesson 4: Presentation and discussion of interactive visuals assignments

Lecture/workshop with active participation

Presentation of assignments from lecture 3. Virtual Reality, Augmented Reality and Mixed Reality – theory, history and examples.

Date and time: Oct 10, 15.30-17.15

Lecturer: Palle Dahlstedt

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Benford & Giannachi - Performing Mixed Reality (introduction) File	30		X
Boden & Edmonds: Generative Art	9		X

Lesson 5 + 6: OSC and Interactive sound in Pure Data programming

Lecture/workshop with active participation

OSC as a standard data interface between applications. Pure Data concepts. Audio tracking. Interaction with synthesis and recorded sound.

An excercise will be given, to be carried out in the semester project groups. It will be presented in a five-minute presentation at lecture 7.

Date and time: Oct 11, 9.15-13.00

Lecturer: Palle Dahlstedt

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Introduction to and specification of OSC http://opensoundcontrol.org/introduction-osc	x		

Lesson 7: Mixed Reality and Further tracking techniques

Lecture/workshop with active participation

Virtual Reality, Augmented Reality and Mixed Reality: Tracking technologies, sensors, motion detection, blob detection, skeleton detection.

Date and time: Oct 19, 15.30-17.15

Lecturer: Palle Dahlstedt

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Krevelen & Poelman (2010) A Survey of Augmented Reality Technologies, Applications and Limitations File	14		X

Lesson 8: Discussion of project ideas and prototypes

Lecture/workshop with demonstrations

We discuss the feasibility of your semester project ideas and prototypes from a performance technology perspective.

Evaluation methods for Mixed Realities.

Date and time: Oct 21, 9.15-11

Lecturer: Palle Dahlstedt

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Grasset: Survey of Evaluation Techniques of Augmented Reality File	11		X

Module 17 ArT-Based Research (Kunstnerisk forskning)

(5 ECTS)

HSA550030C

Location:

ArT5

Study Board:

ArT & Technology

Module coordinator:

Ståle Stenslie, KOM, stenslie@hum.aau.dk

Method of work and language:

Individual or smaller groups in relation to course activities.
English

Module contents:

The module “Art-Based Research” focuses on the meeting between artistic experimental practices as academic methods. These can be artistic installations or exhibitions seeking to generate empirical data of various kinds. The installation should be conceptualized and realized as a methodical means in relation to a set or self-chosen artistic problem formulation. Emphasis will be firstly on practical planning and realization of the installation and, secondly, on the collection and interpretation of the empirical data.

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

- Art-Based Research – theory and practice

Learning objectives:

During this module, students should acquire:

Basic **knowledge** about

- art-based research
- planning, curating and realizing an art-based research installation or exhibition

Skills in

- stating a technologically relevant art-based research problem
- creating concepts for artistic research experiments
- applying testing methods
- employing methods of practical planning, realization, and evaluation of art- based research installations

Competencies in

- developing and realizing art-based research project in the field of art and technology

The module is completed with:

Examination 17

An external oral examination in **Module 17 “Art-Based Research”**
Form of examination: a)

For the examination students are required to produce an artistic research design and an academic report/paper, which must not exceed 10 pages.
Evaluation: Pass/Fail.
Credits: 5 ECTS

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

Period of teaching:	
Exam dates:	Wednesday 5 October 2016
Exhibition dates:	
Deadline:	
Hand-in date:	23 September 2016
To:	Through Digital Exam

Purpose and Goals:

Art-Based Research (ABR) is about doing research though the practice of ArT. ABR is the core of the academic legitimacy of ArT: the use of an ArT-practice for investigating into and finding new knowledge. Where different disciplines have their particular research strategies, the ethnographic methods, the sociological methods, etc. for specific fields, ABR is about the methods used in particular in ArT.

The course introduces the students the foundation of research in an academic context and to discussions about the different forms of research in particular artistic research and practice-based research.

Goals: The course will provide the students with a basic knowledge of dealing with agendas of research and how to construct a research design**.**

Scope and expectations:

The goal is to develop art research projects based on formulating a personal artistic problem, the conceptualization, development and implementation of which are carried out in the art and technology field.

The methodology used is orientated so that students gain content and practical skills to help them develop their art project and develop an academic discourse, both oral and written, aimed at defending art projects in the university environment.

The seminars and workshop will introduce participants to the world of wearable technology applied to fabric or any other medium. After an introduction, in which we will see various projects from artists and designers who are working with these techniques, participants will learn to design and develop an interactive fabric piece. We will experiment with flexible conductive materials, basic electronics and some smart materials. We will learn about different types of sensors and actuators. We will study some flexible circuit design techniques and develop a LED controlling device together.

Exhibition:

The workshop will end with a one day display/mini exhibition of the results during the week.

Prerequisites for participation:

None.

Course: Art-Based Research – theory and practice

(2 ECTS)

Lecture 1: Theorizing artistic practice as research, part 1

The lecture will present and discuss various theoretical approaches to artistic practice as research. The purpose of this is to serve as a theoretical platform for both the workshop and final written assignment

Date and Time: Tuesday, September 6th 9h-15h

Lecturer(s): Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Hannula, Mika; Suoranta, Juha; Vaden, Tere (2005) Artistic research. University of Gothenburg. Download from: https://www.academia.edu/2396657/Artistic_Research._Theories_Methods_Practices	x		yes
Sullivan, Graeme (2010) Art Practice as Research - Inquiry in Visual Arts. Pennsylvania State University, USA. Downloadable from http://uk.sagepub.com/sites/default/files/upm-binaries/31775_Chapter4.pdf		x	yes

Lecture 2: Theorizing artistic practice as research, part 2

The lecture will focus experimental aesthetics as research and give an overview of methodological mapping.

Date and Time:

Lecturer(s): Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Slager, Henk (2015) The Pleasure of Research. Hatje Cantz. Read Chapter 3 and 4.	x		yes

Workshop 1: Workshop-based teaching

Introduction to wearable technology. Project presentation.

Date and Time: Tuesday, September 6th 9h-15h

Lecturer(s): Imanuel Schipper (Rimini Protokoll); Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Performing the Digital (2016) Imanuel Schipper	22		yes
Acts of Spectating (2014) Peter Boenisch	26		yes

Workshop 2: Workshop-based teaching

Practice based research. How to involve basic concepts of electronics: components, circuits, sensors and actuators in wearable applications.

Date and Time: Tuesday, September 6th 9h-15h

Lecturer(s): Imanuel Schipper (Rimini Protokoll); Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Workshop 3: Workshop-based teaching

Interactivity concepts and techniques in a wearable project. Presentation of various techniques.

Date and Time: Tuesday, September 6th 9h-15h

Lecturer(s): Imanuel Schipper (Rimini Protokoll); Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Workshop 4:Workshop-based teaching and final presentation

Develop and present a prototype.

Date and Time: Tuesday, September 6th 9h-15h

Lecturer(s): Ståle Stenslie

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Module 18: Multimedia Programming (Elective) (Multimedie programmering (valgfag))

(5 ECTS)

HSAVB0030D

This module may be offered by the board of study depending on e.g. the amount of students enrolled or other relevant circumstances.

Location:

ArT5

Study Board:

ArT & Technology

Module coordinator:

Markus Löchtefeld, MT
mloc@create.aau.dk
+45 9356 2170

Method of work and language:

Individual or small groups.
English

Module contents:

The goal of this course is to strengthen a student's capacity to participate in multimedia application and software development. This puts the student in a position to take advantage of a significant amount of prior work by integrating a variety of software libraries on a variety of platforms.

* This module may be offered by the board of study depending on e.g. the amount of students enrolled or other relevant circumstances.

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

- Multimedia Programming

Learning objectives:

During this module, students should acquire:

Basic **knowledge** about

- advanced topics of software development relevant to the design and implementation of multimedia software applications, e.g., software design patterns, programming mobile devices and other embedded systems, network programming and VR and AR programming.

Skills in

- applying a variety of intermediate and advanced software technologies, techniques and methods in the construction of effective and efficient multimedia software applications

Competencies in

- analyzing multimedia software engineering problems and select, apply and evaluate appropriate technologies in developing successful solutions
- applyíng advanced concepts in multimedia programming and software engineering

The module is completed with:

Examination 18

An internal written examination in **Module 18: "Multimedia Programming" (Elective).**

Form of examination: c) The examination is a 7-day assignment on a set subject.

Number of pages: the written part 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% attendance and submission of all assignments set during the course.

Credits: 5 ECTS 34

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

Exam dates:	n/a
Exhibition dates:	In class
Deadline:	
Hand-in date:	
To:	Through Digital Exam

Scope and expectations:

The aim of this course is to introduce students to the theoretical and practical aspects of robotic art. The course places equal emphasis on both aesthetic and technical concerns so students can develop competencies in the creation of an aesthetically engaging autonomous art work. Students will learn how to design, program and execute a computer-controlled work of art using models such as random walks, flocking, and Markov chains. Students will also confront issues in planning, coordination, and control that arise when transitioning from computer simulation to the physical world. There are two assignments: (1) a midterm sketch/study and one-page summary and (2) the completion of a group-based mini-project incorporating computer-controlled robotics. Students will be provided with robots to experiment with (the Arduino robot and Sphero mobile robot), but are invited to develop their own design or robotic prototypes. Prior experience in imperative and object-oriented programming (e.g., C++ or Java) is required.There are two assignments: (1) a midterm sketch/study and one-page written summary and (2) the completion of a group-based mini-project incorporating computer-controlled robotics. The mini-project must be accompanied by a written report and oral presentation summarizing the project, method, approach, and conclusions (10 pages maximum).

Students will be provided with robots to experiment with (the Arduino robot and Sphero mobile robot), but are invited to develop their own design or robotic prototypes.

Participants:

Prerequisites for participation:

Prior experience in imperative and object-oriented programming (e.g., C++ or Java) is required.

Course: Multimedia Programming

(2 ECTS)

Lesson 1: Robotic Art and Autonomous Systems

Lecture with subsequent exercises

Origins and development of robotic art from 20th century-present.

This course provides an overview of robotic art from kinetic sculpture to contemporary robotic art.

TBA

Lecturer: Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
"History of Robotic Art" (Eduardo Kaz)	11		
Robotics and Art, Computationalism and Embodiment (Penny)	20		

Lesson 2: Robot Communications

Workshop with subsequent exercises.

Sending commands to and receiving reports from the robot.

TBA

Lecturer(s): Markus Löchtefeld

Assignments: Programming exercises based on session.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Slides and other resources

Lesson 3: Language of Motion I

Workshop with subsequent exercises.

Introduction to the concepts of turtles and random walks as a means for executing basic motions.

TBA

Lecturer: Markus Löchtefeld

Assignments: Programming exercises based on session.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Random walk - Wikipedia, https://en.wikipedia.org/wiki/Random_walk	1		
Abelson, H. and diSessa, A. A. (1980). Turtle Geometry: The Computer as a Medium for Exploring Mathematics. MIT Press.		3	yes
Braitenberg, V. (1984). Vehicles: Experiments in Synthetic Psychology. MIT Press.		3	yes
Pearson, K. (1905). The problem of the random walk. Nature, 72:294, 318, 342. (Mostly for historical interest)		3	yes

Lesson 4: Workshop

Lecturer: Peter Skotte

LOCATION: Fab Lab

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
”Designing Robots with Motion in Mind” (Hoffman and Ju)	32		yes
“The Machine as Autonomous Performer” (Bown et al.)	16		yes
Way of the Jitterbug (Norm White)	15		yes

Lesson 5: Language of Motion II

Lecture with subsequent exercises

Kinesics, flocking/swarming: What do these behaviors and motions indicate about narrative? What narrative, interactive, or dramaturgical potential can we tap into using these external physical behaviors? This lecture considers the use of flocking and swarming algorithms in robotic art installations.

n-class presentations of mid-term sketch/studies with evaluation and feedback. One page summaries due.

Lecturers: Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
In the Dance Studio: Engineering and Human Flocking (Leonard et al)	22		yes
Style-based Robotic Motion in Contemporary Dance (LaViers)	24		yes
“Generating Music from Flocking Dynamics” (Hueppe et al.)	22		yes

Lesson 6: Markov Chains and “Acting for Robots”

Lecture with subsequent exercises

Composing simple motions with state transition networks (Markov chains). Non-functional animations and simulated interactions.

Lecturers: Markus Löchtefeld, Elizabeth Jochum
Assignments: Programming exercises based on session.

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload
Markov Chains: A Visual Explanation by Victor Powell: http://setosa.io/blog/2014/07/26/markov-chains/	3		yes

Lesson 7: TBA

Lecturers: Markus Löchtefeld and Elizabeth Jochum

Literature

	Pri. lit. no of p.	Sec. lit. no of p.	Dig. upload

Lesson 8: Oral presentation of projects and in-class demonstrations

Lecturers: Markus Löchtefeld and Elizabeth Jochum

Module 22: “Electives” (Valgfag)

Location of module:
5th and/or 6th semester

Credits:
5 ECTS

Method of working:
Individual, or project work in groups

Module contents:
The contents of the module will vary according to the academic profile pursued by the student. The contents will be shaped by the modules chosen by the students from the list offered by the various study programs at the faculties of engineering, science and medicine, social sciences, and humanities. Thus, electives offered may be of the following character and academic contents:

- Mathematics
- Nordic architecture, design and art
- Advanced programming
- Advanced aesthetic theory
- Advanced theory of architecture and design
- Advanced theory of science
- Advanced communication and/or media theory
- Advanced interaction technology
- Rhetoric
- Entrepreneurship and Economics

The Board of Studies must approve electives selected by the students no later than mid-August. In connection with the approval of electives, students must state the academic profile they wish to pursue.

General objectives:
That the students select one or more subjects relevant to their study program, and which may support their specific academic profile and specialization thereof – including any further academic perspective the students may have in relation to possible choice of MA program.

Specific objectives:
See the study program regulations of the module in question.

The module is completed with:

Examination 22
The examination will be conducted in accordance with the examination procedure laid down by the Board of Studies in question and the study program regulations of the elective(s)/elective modules in question.

In case the Board of Studies of Art & Technology offers the elective module, the examination is internal, and the following will apply:

Form of examination: c)

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

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

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 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 in the study program regulations of the module in question.