AALBORG UNIVERSITY
DENMARK

Art and Technology, AAU, 1st semester 2015

Sculpture and Technology / Skulptur og teknologi

YOUNGMAN, 2012 /1 wooden stepladder, and discarded wood/ Tim Noble and Sue Webster
http://www.thisismarvelous.com/i/4-Amazing-Shadow-Sculptures-by-Tim-Noble-and-Sue-Webster

AALBORG UNIVERSITY
DENMARK

School: CAT

Study board: ArT & Technology

Study regulation: BA Study Program in Art & Technology, The Faculty of Humanities, AAU, September 2015.

Semester code: ArT1 – HSA160078

Study regulations code: HSA16151

Sculpture and Technology (Skulptur og teknologi)

The semester project for ArT1 2015 is called: Sculpture and Technology – turning scrap into sculptures

Description of the semester project:

On the basis of the fact that humans create enormous amounts of waste (and pollution), it is the student's main assignment to address this phenomenon from an artistic standpoint. The students must therefore use materials that have been discarded as useless and as waste. Within the arts there are several related approaches, such as Found Art, Ready-Made, Waste-Art, Interactive/Kinetic Art and other types of art forms that either addresses the issue in a direct and provocative way or transform waste materials into new aesthetic artifacts and/or critical designs. The precise content of the assignment will be worked out within each group based on common interests in the phenomenon, interest in specific materials (glass, plastic, metal, rubber, electronic waste etc.) and personal or political views on the matter. Each group will therefore present their own unique approach to turning scrap into sculptures and work out a problem statement that clearly defines the approach. Only dogma is that the sculptures should either be interactive or kinetic with respect to integrating basic technological means and made primarily from found materials.

Semester coordinator:	Betty Li Meldgaard, KOM betty@hum.aau.dk +45 9940 3095
Secretariat:	Anne Nielsen, KOM amn@hum.aau.dk +45 9940 9919
Supervisors:	Betty Li Meldgaard, KOM Line Marie Bruun Jespersen, KOM

AALBORG UNIVERSITY
DENMARK

Module 1: Sculpture and Technology (15 ECTS) • Materials - form, structure and composition • Perception in Theory and Praxis I • Artistic and Academic Methodology I (Creative Methods) • Sketching Techniques I	
Supervisors:	Betty Li Meldgaard, KOM Line Marie Bruun Jespersen, KOM
Teaching staff:	Betty Li Meldgaard, KOM Line Marie Bruun Jespersen KOM Elizabeth Jochum, KOM Dario Parigi BYG Marit Benthe Norheim, ART
Module 2: Problem-Based Learning (5 ECTS) • Problem Based Learning	
Supervisors:	Betty Li Meldgaard, KOM
Teaching staff:	Betty Li Meldgaard, KOM
Module 3: Physical Interface Design I (5 ECTS) • Basic Electronics • Sensors and Actuators I	
Supervisors:	Martin Kibsgaard, MT
Martin	Martin Kibsgaard, MT Jesper Thorup Nielsen, ITS
Module 4: History of Art and Technology I (5 ECTS) • History of Art and Technology I	
Supervisors:	Line Marie Bruun Jespersen, KOM
Teaching staff:	Line Marie Bruun Jespersen, 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
ITS	IT-support

AALBORG UNIVERSITY
DENMARK

Module 1: "Sculpture and Technology" (Skulptur og teknologi) (15 ECTS)

HSA110017F

Location:	ArT1
Study Board:	ArT & Technology
Module coordinator:	Betty Li Meldgaard, KOM betty@hum.aau.dk +45 6022 3409
Method of work and language:	Project work in groups. English

Module contents:
In this module, students work with basic theories and practical methods in regard to the creation of sculptures and sculptural installations and the design of physical artefacts as an aesthetic manifestation. Using materiality as a point of departure, students work with basic principles of form, tactility, structure, composition and artistic expression. Students experiment with a variety of materials and basic technologies in connection with the design and creation of physical artefacts. Students work theoretically and experimentally with a variety of formal, static and dynamic principles, and contexts of use.

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

- Materials - Form, Structure and Composition
- Perception in Theory and Practice I
- Artistic and Academic Methodology I: Creative Methods and Academic Writing
- Sketching Techniques

Learning objectives:
The objective of Module 1: "Sculpture and Technology" is to introduce the students to basic problem subjects and solutions in relation to the creation and construction of artefacts, products and installations of sculptural and aesthetic quality.

During this module, students should acquire:

Basic **knowledge** about

- physical artefacts, sculptures and sculptural installations
- application of basic technology in connection with the production and use of artefacts
- aesthetic and artistic means of expression, interaction of form and technology and choice of materials
- methods and tools for the creation of a work from idea to completed artefact

Skills in

- identifying, formulating, and analyzing an artistic problem within the theme "sculpture and technology" and developing alternative concepts for a selected problem
- describing and motivating choice of methods in connection with the production of sketches, models and prototypes of artefacts
- identifying, developing and describing artistic ideas and concepts, and the interaction between form and technology, choice of materials and aesthetic expression
- applying appropriate technologies and construction methods in connection with the production and use of artefacts

AALBORG UNIVERSITY
DENMARK

Competencies in

- describing and analyzing physical artefacts, sculptures and sculptural products
- producing conceptual suggestions of artefacts with artistic quality
- developing practical skills regarding aesthetics and artistic idioms
- describing the completed product in texts, diagrams, drawings, and models, and communicating this in a project report, portfolio, etc.

The module is completed with:

Examination 1
An internal combined written and oral examination in **Module 1: "Sculpture and Technology"** (Skulptur og teknologi).
The examination will take the form of a conversation between the students, the examiner and another examiner on the basis of the project report or portfolio prepared by the student(s) as well as the product created by the students. 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.

Exam dates:	week 3, 2016
Exhibition dates:	December 1 and 2, 2015
Deadline:	
Hand-in date:	December 17, 2015 at 10 am
To:	Anne Nielsen

Materials - form, structure and composition (2 ECTS)

The course provides an insight, with both theoretical and hands-on approach, on how physical principles and material properties affect, directly or not, the work of sculptors.

Lesson 1:	Lecture with exercise
	Basic Principles of Equilibrium Sculptures has almost never a purely structural intent; however sculptures need to be shaped in certain ways in order to exist as physical objects, and structural and material limitations could be understood as opportunities for the artistic expression. The lecture introduces fundamental concepts of forces, moments and equilibrium through the use of

	simple operations and graphic force diagrams. Practical example and exercises will be provided for the application of such concepts in the context of sculpture. Students will be called to create a “mobile”, a type of kinetic sculpture based on the principle of equilibrium.
	TBA
	Lecturer: Dario Parigi
	Daniel L. Schodek, 1993, Structure in Sculpture (pages 40-46)
	Handouts
Lesson 2:	Lecture
	Balance and Movement: Kinetic Sculptures Students will be introduced to the kinetic potential of sculpture through an overview of the constraints and mechanisms that can be combined and assembled in order to achieve an artistic expression.
	TBA
	Lecturer(s): Dario Parigi
	Daniel L. Schodek, 1993, Structure in Sculpture (pages 86-93)
	Handouts
Lesson 3:	Lecture
	Balance and Stability - part 1 The concepts introduced in the first lecture will be applied in the determination of the stability of a structure with both single and multiple supports, either under its own self weight and when subjected to external loads.
	TBA
	Lecturer: Dario Parigi
	Daniel L. Schodek, 1993, Structure in Sculpture (pages 46-85)
	Handouts
Lesson 4:	Lecture with exercise
	Balance and Stability - part 2 An intuitive graphic method will be introduced for the determination of the center of mass of a three dimensional sculpture.
	TBA
	Lecturer: Dario Parigi
	Daniel L. Schodek, 1993, Structure in Sculpture (pages 46-85)
	Handouts
Lesson 5:	Lecture with exercise
	Shapes and Stresses in Structural Systems Analysis of stresses developing in elements of different structural systems: tension, com-

	pression, and bending.
	TBA
	Lecturer: Dario Parigi
	Deplazes, A., 2005, Constructing Architecture: Materials, Processes, Structures (pages 113-138) Daniel L. Schodek, 1993, Structure in Sculpture (pages 104-126)
	Handouts
Lesson 6:	Lecture
	Introduction to Materials: Metal Material properties and crafting techniques have a direct impact on the way the sculptor can work with the material and what forms can be made with it. The lecture presents the mechanical and physical properties of metals, crafting tools, techniques and construction details.
	TBA
	Lecturer: Dario Parigi
	Deplazes, A., 2005, Constructing Architecture: Materials, Processes, Structures (77-112) Daniel L. Schodek, 1993, Structure in Sculpture (pages 242-253)
	Handouts
Lesson 7:	Lecture
	Introduction to Materials: Wood The lecture presents the mechanical and physical properties of wood, crafting tools, techniques and construction details.
	TBA
	Lecturer: Dario Parigi
	Deplazes, A., 2005, Constructing Architecture: Materials, Processes, Structures (pages 56-76) Daniel L. Schodek, 1993, Structure in Sculpture (page 253)
	Handouts
Lesson 8:	Lecture
	Introduction to Materials: Concrete The lecture presents the mechanical and physical properties of concrete, crafting tools, techniques and construction details.
	TBA
	Lecturer: Dario Parigi
	Deplazes, A., 2005, Constructing Architecture: Materials, Processes, Structures (pages 56-76) Daniel L. Schodek, 1993, Structure in Sculpture (pages 260-265)
	Handouts

Perception in Theory and Praxis I (1 ECTS)	
Lesson 1-2:	Lecture (1+2 and 3+4)
	Perception in Theory and Praxis – Introduction The functional relation between perception and materials in relation to visual and tactile perception. How does things look and feel? The lecture will provide the students with an extensive vocabulary to support choices of materials and objects for the semester assignment. Assignment – *Environmental Investigation* – will be handed out in relation to the course.
	Date for lesson - see calendar.
	Betty Li Meldgaard
	Literature relevant for the main semester report will be given in relation to the course
	Refs. to the course content and suggested readings: Ian Gordon, "Theories of Visual Perception", 3rd. ed. Wade and Swanston, "Visual Perception – an introduction", 2004 James J. Gibson, "Ecological Approach to visual perception", Lawrence Erlbaum Associates, 1979/1986 http://webmineral.com/help/Habits.shtml
Lesson 3-4:	Lecture (5+6 and 7)
	Lecture (and assignment presentation). After the students have presented the result from the assignment the course will end with a lecture that touches upon the understanding of the history and science behind theories of perception. The goal of the course is to deepen the understanding of the history and science behind theories of perception.
	Date for lesson - see calendar.
	Betty Li Meldgaard
	Literature relevant for the main semester report will be given in relation to the course

Artistic and Academic Methodology I (Creative Methods) (1 ECTS)	
Lesson 1:	Workshop
	Introduction Academic Writing. This workshop provides students with an introduction to the fundamentals of academic writing. Special attention will be given to organizational and research methods for ArT semester reports (including bibliographic references citation methods), as well as case studies/user studies, and challenges unique to interdisciplinary and co-authored reports.

	Special attention will be dedicated to online resources, AAU library services, as well as PBL requirements.
	Date for lesson - see calendar.
	Elizabeth Jochum
	Readings: *Writing in College* (Univ of Chicago) by Joseph Williams and Lawrence McEnernery.
	https://owl.english.purdue.edu/owl/resource/658/01/ http://www.chicagomanualofstyle.org/home.html http://www.en.aub.aau.dk *Handouts* *Form & Style* (Carole Slade & Robert Perrin) Chapter 1, 3, and 7 *Handbook for Writers* (Ruszkiewicz et al.) Ch 6: How Do You Write in College?
Lesson 2:	Workshop
	Academic Methodology: Applied Methods. What is applied research, and how is it relevant to ArT study and your project reports? This workshop provides students with an introduction to applied methods in the humanities with a specific focus on new media art and interdisciplinary research projects that combine scientific and artistic methods. We discuss specific evaluation methods that frame applied research in Art and Technology and HCI research.
	Date for lesson - see calendar.
	Elizabeth Jochum
	New Media Art (Mark Tribe) *Interactive Experience in the Digital Age* (Candy and Ferguson)- Introduction "Blending Art Events and HCI Research" (Reilly et al.)
	https://wiki.brown.edu/confluence/display/MarkTribe/New+Media+Art
Lesson 3:	Lecture
	Artistic Methods: Sculpture & Performance Early History. This class traces the intersection of sculpture, kineticism and performance in the early twentieth century avant-garde. We specifically look at works by Umberto Boccioni, Fortunato Depero, Maholy-Nagy and Alexander Calder to chart the development of non-figurative sculpture in European and American kinetic art and its impact on late-twentieth century sculpture.
	Date for lesson - see calendar.
	Elizabeth Jochum
	"Colori" (Fortunato Depero). "Absolute Motion + Relative Motion = Dynamism" (Umberto Boccioni) *Beyond Modern Sculpture*: CH 1 "Sculpture's Vanishing Base," Ch 6 "Kineticism: The unrequited Art" (Jack Burnham).
Lesson 4:	Lecture
	Artistic Methods: Sculpture/Performance/Installation late 20th/ early 21st century This class discusses the performative turn in sculpture that includes systems and generative art. We consider how relevant works by Robert Breer and Billy Klüver and Fujiko

	Nakaya developed by E.A.T. artists for the *Expo '70* and other contemporary interactive sculptures, as well as *Cybernetic Serendipity* and *Nine Evenings*, as well as contemporary robotic art works, deliberately experiment with performance elements and structure to interrogate the concept of sculpture in the postmodern age.
	Date for lesson - see calendar.
	Elizabeth Jochum
	Beyond Modern Sculpture: Ch 7 "Light Sculpture as Medium," Ch 8 "Robots and Cyborg Art" (Jack Burnham) "The Machine as Autonomous Performer" in *Interactive Experience in the Digital Age* (Bown et al.) "The Telegarden and Other Oddities" *in Robots and Art: An Unlikely Symbioses*. Jochum and Goldberg.

Sketching Techniques I (1 ECTS)	
Lesson 1-2	Workshop
	From ideas to realisation. Marit Benthe Norheim will show different ways of communicating dreams, thoughts and ideas via sketching techniques and examples from various artists: – She will also show how sketches of an artist's vision and technical drawings from engineers meet and develop in collaboration. The students will be encouraged to express themselves by trying to understand the enjoyment of sketching.
	Date for lesson - see calendar.
	Marit Benthe Norheim, the artist behind Campingwomen and Life-boats. By www.norheim.dk and www.life-boats.com
	Sept. 23. – 24.
Lesson 3-4:	Workshop
	Robert Wood – Guest Lecturer

AALBORG UNIVERSITY
DENMARK

Module 2 "Problem Based Learning" (Problembaseret læring) (5 ECTS)

HSA110021F

Location:	ArT1
Study Board:	ArT & Technology
Module coordinator:	Betty Li Meldgaard, KOM betty@hum.aau.dk +45 9940 3095
Method of work and language:	Group work English

Module contents:
This module consists of an introduction to the main constituents of art and technology projects: problem-based learning and project work including statement of problem, artistic practice, academic methods and technological means. Furthermore, the module introduces group work and supervision. The module is arranged as a minor project including lectures and workshops.

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

- Problem Based Learning

Learning objectives:
During this module, students should acquire:

Basic **knowledge** about

- problem-based learning and project work
- the importance of choice of methods
- the application of technological means and materials

Skills in

- identifying and formulating an artistic problem within the areas art and technology
- describing and validating choice of methods for solving a defined problem
- collecting and applying relevant knowledge in relation to a defined problem
- finding and applying practical solutions

Competencies in

- structuring and reflecting on a problem-based project process
- participating in professional and interdisciplinary and intercultural collaboration in order to solve a defined problem.

The module is completed with:

Examination 2
An internal oral project examination in **Module 2 "Problem Based Learning"** (Problembaseret læring) on the basis of a project report that must not exceed 3 pages per student.

Form of examination: b)
Duration: 15 min per student.

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

AALBORG UNIVERSITY
DENMARK

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:	
Exhibition dates:	
Deadline:	
Hand-in date:	No hand-in. Group presentations
To:	Anne Nielsen
Scope and expectations: In order to pass the course students will have to attend 80% of the course and show active participation in the Parking Day event on the 16th of Sept.. Additionally the students will make a presentation of the problem statement, the work process and the results of the work with Parking Day in order to pass the course. Specifics regarding the presentation, including a schedule and time frame will be given during the PBL course.	
Module activities (course sessions etc.) Beside the listed activities below, the module will consist of workshop-activities, ad hoc student presentation and feedback as well as supervision.	

Problem Based Learning (2 ECTS)	
Lesson 1:	Lecture (1 and 2)
	PBL- introduction The purpose of the first 2 lectures is to give an introduction to the Aalborg PBL model, which is based on group work and group supervision. Furthermore, in relation to Art and Technology, we will look at the play based extended concept of PBL, namely PpBL (Problem and play based learning)
	TBA
	Lecturer: Betty Li Meldgaard
	Hans Kiib in “The Aalborg PBL model” - Playbased Learning p. 205 Kolmos, Fink and Krogh, “The Aalborg PBL Model”, 2004 p. 10 Principles of project organized problem-solving – Kjærsdam and Enemark/1994 in “The Aalborg PBL Model” (2004
Lesson 2:	Lecture (3 and 4)
	Problem Statement – How (we create it) and Why (we need it) The lectures will work with academic and artistic problem statements in relation to Parking Day
	See schedule

	Lecturer: Betty LI Meldgaard
	Literature: D. David Sapp. 1997. “Problem Parameters and Problem finding in Art Education” Autoethnography: http://www.qualitative-research.net/index.php/fqs/article/view/1589/3095
Lesson 3:	Lecture (5 and 6)
	Finding the problem together – group work. These lectures will focus on group work and the challenges of formulating a problem. The lectures will be a combination of teaching and small group assignments centered on identifying a collective problem and working with an artistic solution to problems based on the collective coming together of individual approaches and skills. Assignment will be a 3 page introduction to a problem formulation, which will form the basis for analysis in Academic Methodology and a problem formulation which will form the basis for carrying out the Parking Day project.
	See schedule
	Lecturer: Betty Li Meldgaard
Lesson 4:	Lecture (7 - 8)
	PBL – supervision and evaluation. During this part of the course, supervision and the relation between supervisors and students will be on the agenda. Furthermore, challenges related to evaluation and examination will be addressed in relation to the Aalborg model of doing group exams.
	See schedule
	Lecturer: Betty Li Meldgaard

AALBORG UNIVERSITY
DENMARK

Module 3 "Physical Interface Design I" (Fysisk interface design I) (5 ECTS) HSA110019D

Location:	ArT1
Study Board:	ArT & Technology
Module coordinator:	Martin Kibsgaard (Media Technology) kibsgaard@create.aau.dk
Method of work and language:	Individual or small groups English

Module contents:
In this module, students learn about basic principles of electronics and how different electronic sensors and actuators can be interfaced to a microcontroller to design alternative forms of interactions between man and machine.

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

- Basic Electronics
- Sensors and Actuators I

Learning objectives:
During this module students should acquire:

Basic **knowledge** about
- basic electronics: resistors, diodes, and transistors
- sensing possibilities: binary (buttons) and continuous (analog) sensors
- related work in sensor technology and the media arts

Skills in
- developing and applying a physical interface using specific sensors and actuators
- analyzing use of the artefact
- synthesizing knowledge in written documentation

Competencies in
- evaluating an artefact with regards to basic electronics, sensors, and actuators.

The module is completed with:

Examination 3
An internal written examination in **Module 3: "Physical Interface Design I"** (Fysisk interface design I).

Form of examination: c)
The examination is a 7-day assignment on a set subject.
Number of pages: the written part must not exceed 5 pages.

Evaluation: pass/fail. 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.

Exam dates:	TBA at moodle
Exhibition dates:	
Deadline:	
Hand-in date:	TBA at moodle
To:	Anne Nielsen

Scope and expectations:

The world of electronics is an essential gateway to the creation of many interesting projects. This course will cover some of the general concepts regarding working with electronics, with the goals of providing course participants with

- Understanding of and ability to work safely with basic electronics
- Ability to do basic calculations on resistor-diode circuits
- Knowledge of different types of electronic sensor and actuators
- Ability to design, simulate and build basic circuits

The content of the course is developed for entry-level participants with little or no experience with electronics. The course will cover theoretical concepts (such as electronic units and ohms law) as well as practical concepts. Each lecture covers a set of skills which will be put into use at assignments both during and after each lecture.

Basic Electronics (1 ECTS)

Lesson 1:	Lecture
	Introduction to Basic Electronics. Electricity recap: Current, Voltage, Power, Resistance, Units, Kirchoff's circuit laws, Ohm's law. Materials needed for the course. Introduction to the lab and Jesper Nielsen. Safety.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and Online Resources Literature for the module: **Make: Electronics, 2nd Edition** Learning Through Discovery By Charles Platt Publisher: Maker Media, Inc Final Release Date: August 2015 Pages: 352
Lesson 2:	Lecture

	Electronic Components: Resistors, Diodes, Switches, Transistors, (Capacitors), Power supply, Multimeter. Calculate different circuits containing resistor networks. Build them and measure them. Prototyping. Safety recap.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and online resources
Lesson 3:	Lecture
	Reading schematics: Symbols, Approaches. Example schematics: Voltage divider, Switch with pull-up resistor, Blink circuit, etc. Calculating component values. Software to visualize and simulate. Building circuits from schematics.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and online resources
Lesson 4:	Lecture
	Building circuits and approaches to debugging circuits (“Why isn’t it working?”). Measuring with multimeter and oscilloscope.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and online resources

Sensors and Actuators I (1 ECTS)	
Lesson 1:	Lecture
	Overview of different sensors: Motion, Light, (Cameras), Sound, Pressure, Temperature, Switches, Triggers, Distance. Inertial measurement units (IMUs): Acceleration, Rotation, Magnetic.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and online resources
Lesson 2:	Lecture
	Overview of different actuators: Motion, Light, Sound, Temperature. How to control high power actuators: Transistors, Relays. Safety.
	Date for lesson - see calendar.

	Martin Kibsgaard
	Slides and online resources
Lesson 3:	Workshop
	Using the sensors and actuators to build circuits. Basic introduction to Arduino and microcontrollers: Input, Output, Digital, Analog. Basic introduction to programming a microcontroller.
	Date for lesson - see calendar.
	Martin Kibsgaard
	Slides and online resources
Lesson 4:	Workshop
	Wider scope: Idea generation with electronics and semester projects.
	Date for lesson - see calendar.
	Martin Kibsgaard

AALBORG UNIVERSITY
DENMARK

Module 4 "History of Art and Technology I" (Kunst- og teknologihistorie I) (5 ECTS)

HSA160079)

Location:	ArT1
Study Board:	Art & Technology
Module coordinator:	Line Marie Bruun Jespersen, KOM linebruun@hum.aau.dk
Method of work and language:	Individual work in relation to course activities English

Module contents:
The module is an introduction of the students to the history of art and technology with special emphasis on the theories and techniques, which have been or are currently prevailing in the areas of art experience and aesthetics.
Together with History of Art and Technology II the module introduces the students to examples of artists, artworks and historic events that are significant to the history of art and technology. Using the teaching forms of lectures, workshops and seminars, the module will introduce problems regarding description and analysis of artworks.

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

- History of Art and Technology I

Learning objectives:
During this module, students should acquire:

Basic **knowledge** in

- the history of art and technology
- aesthetic theories within the field of art and technology
- central works of selected art periods and genres

Skills in

- analyzing works of art
- applying central concepts and analytical methods within the history of art and technology – and acquiring familiarity with their historical context and conditions.

Competencies in

- comparing various works from selected art periods as regards artistic expression, technological contents, and experience effect
- applying central works from the history of art and technology as a framework for reflection and inspiration in relation to their own works.

The module is completed with:

Examination 4
An internal written examination in Module 4 "History of Art and Technology I" (Kunst- og teknologihistorie I)

Form of examination: c)

AALBORG UNIVERSITY
DENMARK

The examination is a 7-day assignment on a set subject. One examiner evaluates the assignment. Number of pages: the written work must not exceed 12 pages. **Evaluation**: pass/fail. 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.

Exam dates:	TBA at moodle
Exhibition dates:	
Deadline:	
Hand-in date:	TBA at moodle
To:	Hand in via upload on Moodle
Scope and expectations:	
Participants:	
ArT1 students	
Prerequisites for participation:	
Module activities (course sessions etc.) Lectures + workshop sessions including discussions, analytic exercises, practical assignments/experiments.	

History of Art and Technology I (2 ECTS)

Lesson 1:	Type of teaching: lecture+workshop
	Introduction to History of art and Technology. Concepts and philosophies of technology exemplified through art history 1 Introduction to the course and distribution of assignments. Based on the text by Drengson a selection of significant examples from art history will be analyzed and discussed.
	Date of the activity
	Lecturer(s): Line Marie Bruun Jespersen
	Set readings: Technology and values. Alan R. Drengson: Four Philosophies of Technology. P 26-37 (Moodle) Recommended readings: Arthur Clay: On Science On Art On Society: Interviews with innovators. iBooks. A. Jamison, L. Botin,, S. H. Christensen: A Hybrid Imagination. Science and Technology in Cultural Perspective. Chapter 5 (Moodle)

	L. Mumford: Technics and Civilization. Chapter 1: Cultural preparation p.9-59 and Chapter 2: Agents of Mechanization p. 60-105 L. Mumford: Art and Technics p. 9-157
	Slides and other resources: will be available on Moodle on the date of the lecture
Lesson 2:	Type of teaching: lecture+workshop
	History of art and technology 2 Lecture on significant technological developments in the 20th century, that have had impact on art, architecture and design. Special focus on the discussions of mass production vs. craft in the avantgardes of the early 20th century: Arts and Craft, Futurism, Bauhaus, Constructivism. Workshop: group discussions on Futurism, Bauhaus and Constructivism examples.
	Date of the activity
	Lecturer(s) Line Marie Bruun Jespersen
	Set readings: A. Jamison, L. Botin,, S. H. Christensen: A Hybrid Imagination. Science and Technology in Cultural Perspective. Chapter 5 (Moodle) Stephen Farthing (ed.): Art – The Whole Story. Thames and Hudson pp.396-403, 414-418, Recommended readings:
	Slides and other resources: will be available on Moodle on the date of the lecture
Lesson 3:	Type of teaching: lecture+workshop
	Art History – concepts of style 3 The lecture focus on the concept of style. Based on the two texts by Gombrich and Wollflin, we will analyze and discuss “style” of art examples from different artists and from various stylistic eras. In the workshop students will study the stylistic features of some of main “-isms” in western art history.
	Date of the activity
	Lecturer(s) Line Marie Bruun Jespersen
	Set readings: The Art of Art History. A critical anthology. Donald Reziozi (ed.): Wöllflin: Principles of Art History p110-129 Ernst Gombrich: Style p. 130-140 Recommended readings: Stephen Farthing (ed.): Art – The Whole Story. Thames and Hudson. –or similar introduciton to western art history. Art- The Whole Story is available in the bookshop Architegn.
	Slides and other resources: will be available on Moodle on the date of the lecture
Lesson 4:	Type of teaching: lecture+workshop
	Media Archeology – moving images 4 This lecture gives and introduction to the field of “Media Archeology” and the link between development of different types of visual media and art history. Different “viewing machines” and inventions towards the moving image.

	Workshop: Students will make and present their own experiments with moving images.
	Date of the activity
	Lecturer(s): Line Marie Bruun Jespersen
	Set readings: Werner Nekes: Media Magica. Pp. 30-39 and Stefan Thermerson: The Urge to Create Visions. Pp 40-47 In: Jeffrey Shaw and Peter Weibel (eds.): The Cinematic Imaginary after Film. MIT Press 2003 Marshall McLuhan: Understanding Media: The Extensions of Man Movies, Radio, Television p. 381-447 Recommended readings: Marshall McLuhan: Understanding Media: The Extensions of Man. Part 1. P. 17-108
	Slides and other resources: slides will be available on Moodle on the date of the lecture http://channel.louisiana.dk/video/david-hockney-lost-knowledge
Lesson 5:	Type of teaching: lecture + workshop
	Sculpture – formal qualities and technology 5 History of Sculpture. The lecture introduces various composition principles, construction principles, materials and surface properties in the history of sculpture. Workshop: composition exercises in 2 and 3 dimensions
	Date of the activity
	Lecturer(s): Line Marie Bruun Jespersen
	Set readings: Potts, Wood, Hulks: Modern Sculpture Reader Ching: Form, Space and Order Recommended readings: Potts, Wood, Hulks: Modern Sculpture Reader Herbert Read: Modern Sculpture – A Concise History. Thames and Hudson World of Art.Herbert Read: The Art of Sculpture.
	Slides and other resources: will be available on Moodle on the date of the lecture
Lesson 6:	Type of teaching: lecture+workshop
	History of Sculpture. The lecture focus on Kinetic Sculpture and Sculpture Analysis 6 Lecture: Kinetic Sculpture and Sculpture Analysis Workshop will the place in Musikkens Hus, where we will see Jeppe Hein: Reflecting Frequencies 2014. Students will do exercises in sculpture analysis.
	Date of the activity
	Lecturer(s): Line Marie Bruun Jespersen
	Set readings: Maria Fernandez: 'Life-Like': Historicizing Process and Responsiveness in Digital Art. P. 468-485 Sculpture from Antiquity to Present Day: P. 1057-1113, p. 1136-1148 MIT Museum: 5000 Moving Parts: http://web.mit.edu/museum/exhibitions/5000.html Recommended readings:

	See recommended readings for lecture 4.
	Slides will be available on Moodle on the date of the lecture Other resources: http://channel.louisiana.dk/video/sarah-sze-meaning-between-things
Lesson 7:	Type of teaching: Lecture+workshop
	Object Trouvé and ready mades 7 Lecture on the use of the found everyday object in art. Ready mades, object trouvés and collages all utilize everyday objects for aesthetic purposes, and transport these objects from one sphere into the shere of art and subsequently into the art institution. Workshop: student presentations on Dada, Noveau Realisme and Arte Povera.
	Date of the activity
	Lecturer(s): Line Marie Bruun Jespersen
	Set and recommended readings: Stephen Farthing (ed.): Art – The Whole Story. Thames and Hudson. Pp. 410-413, 496-497, 516-517 *MOMA, Object Trouvé: http://www.moma.org/collection/theme.php?theme_id=10135* MOMA, Marcel Duchamp and the ready made: http://www.moma.org/learn/moma_learning/themes/dada/marcel-duchamp-and-the-readymade
	Slides and other resources: will be available on Moodle on the date of the lecture
Lesson 8:	Type of teaching: Lecture+workshop/Student seminar
	How to writ about art history 8 Short lecture about paper writing at the university, using the HAT1 paper assignment as an example. Workshop/Student seminar. Students prepare a 5-7 min presentation for the seminar. The presentation must include texts/theories taught in the course. The art/technology-examples reflect the students own interest. Students will present to each other in groups of four and give peer-to-peer feedback, which can help to improve the assignment before hand-in. After the Seminar students must rework their presentation into a written paper.
	Date of the activity
	Lecturer(s) Line Marie Bruun Jespersen
	Set readings: Anne D´Aleva: Methods and Theories of Art History. Lawrence King Publishing. 2012 Pp. 5-16, 152-165 Recommended readings: all the above
	Slides and other resources: will be available on Moodle on the date of the lecture