Media & Film

- courses for exchange students –

Beginner courses:

- Camera Acting (Film Project)
- Design
- Game Design 1
- Innovative Storytelling in Digital Media*
- Practice Dramaturgy**

Intermediate courses:

- Media Project
- Mixed Reality*
- Perception*
- Short Cut (Film Project)
- Sound Design
- Video Technology & Production

Advanced courses:

- Media IT Systems
- Media Design 2

NOTES:

* class is offered in winter semester only ** class is offered in summer semester only

Classes are held either in English or as a mixture of English and German, with English language support provided. Group projects can make English the team language. Students are only allowed to take a maximum of 30 ECTS credits in one semester. All courses take place on the Art & Media Campus Finkenau.

Department of Media Technology (January 2024)

Beginner courses:

Course Name: Camera Acting (Film Project)
Course language: English / German (support will be provided if needed)

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Wolfgang Willaschek, Christina Becker, Martina Hentig, Nathalie Mai

Workload: 150 h	**Lecture hours per week:** Project	**ECTS Credits:** 5

Course objectives:

- Camera Acting is the practical application of the theory taught in first semester Media Technology and includes drafting, development and filming of a short film. Students will have a look at the basics of picture aesthetics and the techniques of storytelling:
- How an idea is secured through a storyboard
- Developing & building a functional set design
- Understanding the principle of non-linear film making
- Getting introduced to light, camera and sound equipment
- The footage is recorded to be processed in a reduced post-production, including editing within industry standard software AVID & experimenting and experimenting with another layer of storytelling: sound design.

Contents:

Students work as a group with a screen play and develop a storyboard and a shot list. They rehearse scenes and are introduced to using cameras and the labs. They film their version of the story and complete the post-production.

About didactics and workload distribution:

Students meet with the professor and the tutors at the beginning of the semester to discuss the story that is to be filmed and to be put into groups. They meet regularly as groups in their own time and have a set week for filming the story in May or November. They will receive a schedule for further meetings.

In preparation for the shot, each group will have a detailed introduction into light, sound and camera equipment as well as a mandatory safety briefing for working at the studio.

Please note some meetings for this project can involve students speaking German. Translation and additional language support will be provided.

Requirements for participation:

Beginner level: Interest (and possibly some experience) in film projects.

Type of exam:

Participation during the producing process. The grade is awarded based on the final film product.

Requirements for credit point allocation:

Regular participation in the preparatory meetings, a clear role in the film team (stage directing, production management, camera, lighting, sound, set design, etc.); successful completion of the film project (e.g. DVD).

Sources:

Literature and Manuscripts about Storytelling and Storyboard

Course Name: Design

Course language: English / German (support will be provided if needed)

Degree programme:	Responsible Lecturer(s):
Media Technology & Media Systems (Bachelor)	Prof. Ralf Hebecker

Workload: 150 h	Lecture hours per week: 2	ECTS Credits: 5

Course objectives:

- Design basics and design practice
- Independent design work in small groups and alone
- Concept development (idea, exposé, draft, presentation, pre-production, production, post-processing and refinement)
- Analysis and adaptation of journalistic/scientific short film and podcast formats. Awareness and solution approaches for design issues
- Basics of journalistic/academic writing and citation
- Introduction to the art of film titling.

Contents:

- A project-oriented and hands-on introduction to the basics and approaches of visual and conceptual design
- In the project part, small teams research and develop short films in the footsteps of popular YouTube formats
- "Find and solve a problem" invites participants to look for design problems and suggest own solutions for them
- Lectures introduce the topics: basics of visual design, concept & briefing, grid systems, fonts and colours, user interface / user experience, writing, citing and game design.
- During the course, the progress of the projects will be discussed and further developed together in studio sessions.

About didactics and workload distribution:

Classical Seminar

Requirements for participation:

Beginner level – Interest in design

Type of exam: To be announced

Requirements for credit point allocation:

Project hand-in with presentations (short film / podcast group project plus small individual design work).

Sources:

- Art of the Title, LLC. (2007-23). The Art of the Title: *https://www.artofthetitle.com/*
- Butterick, M. (n.d.) Typography in 10 minutes: *https://practicaltypography.com/typography-in-ten-minutes.html*
- Ferguson, K. (2011/12). Everything is a Remix series: *https://www.everythingisaremix.info/watch-the-series*
- Fadell, T. (2015). "The first secret of design is ... noticing": *https://www.everythingisaremix.info/watch-the-series*
- GCFGlobal.org (n.d.). Beginning Graphic Design: *https://www.ted.com/talks/tony_fadell_the_first_secret_of_design_is_noticing*
- Gunn, G. / The Future Academy (2021). How to Not Suck at Color - 5 color theory tips every designer should know *https://www.youtube.com/watch?v=C1rQQ_Ypgcl&feature=youtu.be*
- Norman, D. A. (1996). The Design of Everyday Things
- Vox (2016). It's not you. Bad doors are everywhere: *https://www.youtube.com/watch?v=yY96hTb8WgI&feature=youtu.be*
- Vox (2020). The 8-bit arcade font, deconstructed: *https://www.youtube.com/watch?v=C5NiAoT3xsY&feature=youtu.be*

Course Name: Game Design

Course language: English / German (support will be provided if needed)

Degree programme:	Responsible Lecturer(s):
Media Systems (Bachelor)	Prof. Ralf Hebecker

Workload: 150	Lecture hours per week: 3	ECTS Credits: 5

Course objectives:

The main goals are small group projects, coming up with one or two small, playable and polished games from experimental to commercial and an insight into the processes and methods of professional game Design and production.

Contents:

Game Design offers an open, modern, project-oriented hands-on studio environment for the ideation, design, production and refinement of small game projects over the course of one or two semesters.

Additional highlights are several guest lectures by industry professionals, shared test sessions / presentations, in part also with students from the games master program and in the Games Lab, and lectures and feedback sessions with the whole personnel of the Games master programme (Ralf Hebecker, Anke Günther, Gunther Rehfeld, Kolja Bopp, and Maik Helfrich).

About didactics and workload distribution:

Classical Seminar

Requirements for participation:

Beginner level: none

Type of exam: Pass/No pass

Requirements for credit point allocation:
Project hand-in with group test sessions and presentations.

Sources:

- Brown Bag Films (2017), based on The Illusion of Life by F. Thomas and O. Johnston (1981). 12 Principles of Animation Compilation: *https://www.youtube.com/watch?v=pDVfNf5GvPg*
- Brown, M. (2014-). Game Maker's Toolkit (Video series): *https://www.youtube.com/@GMTK*
- Brown, M. / Game Maker's Toolkit (2015). Secrets of Game Feel and Juice: *https://www.youtube.com/watch?v=216_5nu4aVQ*
- Egoraptor (2011). Sequelitis – Mega Man Classic vs. Mega Man X: *https://www.youtube.com/watch?v=8FpigqfcvlM*
- Extra Credits (2012).
  So You Want to Be a Game Designer – Career Advice for Making Games: *https://www.youtube.com/watch?v=zQvWMdWhFCc*
  So You Want to Be a Developer – I: How to Think Algorithmically: *https://www.youtube.com/watch?v=WCuUWGmatpU&list=PLB9B0CA00461BB187&index=80*
  So You Want to Be a Developer – II: Understand Your Coworkers and Your Users: *https://www.youtube.com/watch?v=kqFcF_jRrx0&list=PLB9B0CA00461BB187&index=81*
- Fail Faster – A Mantra for creative Thinkers (2015).
- Making Your First Game: Basics – How to Start Your Game Development: *https://www.youtube.com/watch?v=z06QR-tz1_o*
- Making Your First Game: Practical Rules – Setting (and Keeping) Goals: *https://www.youtube.com/watch?v=dHMNeNapL1E*
- Making Your First Game: Minimum Viable Product – Scope Small, Start Right: *https://www.youtube.com/watch?v=UvCri1tqIxQ*
- Nijman, J.W./ Vlambeer (2013). The art of screenshake: *https://www.youtube.com/watch?v=AJdEqssNZ-U&feature=youtu.be*
- Riot Games, Inc. (n.d.). So you wanna make games?? (Art Education Video Series): *https://www.riotgames.com/en/artedu*
- Schell, J. (2008). The Art of Game Design. A Book of Lenses
  Unity Technologies (2023). Unity Asset Store: *https://assetstore.unity.com/*

Course Name: Innovative Storytelling in Digital Media (winter semester only)

Course language: English

Degree programme:	Responsible Lecturer(s):
Interdisciplinary course and project Design-Media-Information (Bachelor)	Prof. Wolfgang Willaschek, Christian Holst

Workload: 150 h	Lecture hours per week: 4	ECTS Credits: 5

Course objectives:

The special character of this course is that it has been developed and is coordinated by three professors from the three departments of the Faculty Design, Media and Information. Content and structure is aimed at a close connection between text and picture media as a foundation for the transfer into new forms of digital media. This includes working with traditional print media and the film genre and goes as far as to include websites, blogs and the various forms of social media. The course has a strong international element and is tied closely and involves students in the exchange programs at the HAW Hamburg.

Contents:

After a general introduction to the central aspects of storytelling and media theory the students are divided into groups of four to six students. Together they develop the dramaturgy and basic structure of a chosen topic. The second step of the project is to transfer the idea to the use of images. Students try different forms of photography and other image forms. In the third phase of the project they implement "word and image" into a digital media, including design and programming. The foundation for this three-part project can be photography projects that have been completed previously by Photography students or topics from other courses, such as portraits and profiles from the viewpoint of students.

About didactics and workload distribution:

The students develop the different project steps "Text-Image-Medium" as described in a continuous process as a group throughout the semester. Depending on the topic and structure students can decide to be responsible for certain elements of the project. The project development is accompanied by presentations during the semester and a final presentation to different groups.

Requirements for participation

Beginner level – None

Type of exam:

In addition to different group presentations the students also have to produce a reflection of their work and their perception of the project. At the end of the course there is a public presentation.

Requirements for credit point allocation:

Regular participation in the class.

Sources:

Literature about Digital Culture and Communication (Holst, Christian, Digitale Kulturkommunikation, Springer, Wiesbaden 2021)

Course Name: Practice Dramaturgy (summer semester only)

Course language: English / German (support will be provided if needed)

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Wolfgang Willaschek

Workload: 150 h	**Lecture hours per week:** 4	**ECTS Credits:** 5

Course objectives:

The primary goal of the course is to bring media technology students closer to the artistic/creative people which is required as part of the preparation of a film, theatre production or an art project and to improve the way people with a technical background and people with an artistic background work together. Students are involved in the conceptional work and later in the project development in the field of work.

Contents:

In "open discussion groups" students look at topics such as text work, staging methods and production management. Students can be involved in the conceptual development and completion of a film project. They can also look at film, book or song texts in different genres to discover their own personal taste.

About didactics and workload distribution:

Students complete weekly tasks, such as sample texts, short presentations or conceptual drafts for films.

Students can work independently or as part of a student team. These projects can be completed with support from the technical staff of the video, audio and production labs.

Requirements for participation:

Beginner level – None

Type of exam:

Regular grading of the papers and tasks throughout the semester, presentation of group projects

Requirements for credit point allocation:

Regular participation in class discussions. Individual grades for the semester papers throughout the semester.

Sources:

Literature about Film, Theatre, Art, based on special themes during the semester

Intermediate courses:

Course Name: Media Project

Course language: English / German (support will be provided if needed)

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Wolfgang Willaschek, Christina Becker

Work load: 240 h	Lecture hours per week: Project	ECTS Credits: 8

Course objectives:

PM GmbH is a film production and service company for events, culture and virtual reality with locations throughout Germany. Each semester a group of students complete a project in the PM studios in Hamburg and in cooperation with the professionals who work there.

Contents:

The project can be the transformation of a theatre play, a current staging production or a talk show into a film production or an interactive (real engine, games) production. The students are introduced to the use of the OB vehicle, working with cameras, lighting and sound. The PM Blue project is organized as a large project with different sections and is divided into section leaders and teams for production, recording, directing, picture technology, lighting, sound, staging technology, camera, dramaturgy, editorial, trailer, making of and catering.

About didactics and workload distribution:

This is a project-based class without lectures. A large group of students prepare a film or TV project during the first 15 weeks of the semester and then spend a week filming at the beginning of June or December in the professional PM studio. In preparation for this week of filming there will be meetings leading up to the week in the PM studio. Each student has a clear role as part of the project crew.

Requirements for participation:

Intermediate level: Some background in filming and experience in working on a film or television project.

Type of exam:

Project participation and completion of the project

Requirements for credit point allocation:

Regular participation in the preparatory meetings, a clear role in the week of filming (camera, lighting, sound, stage directing, production management, set design, TV presenter, etc.); successful completion of the film project (e.g., DVD)

Course Name: Mixed Reality (winter semester only)

Course language: English

Degree programme:	Responsible Lecturer(s):
Media Technology & Media Systems (Bachelor)	Prof. Dr. Eike Langbehn

Workload: 150 h	Lecture hours per week: 4	ECTS Credits: 5

Course objectives:

Students

- know basic requirements of XR technology
- are able to design XR applications
- are able to implement XR applications

Contents:

- Basics of XR technologies
- Introduction to (3D) Tracking systems
- Introduction to (3D) Display systems
- 3D / Motion Capturing
- Virtual Production

About didactics and workload distribution:

- Hands-on work in laboratory (4h/week)
- Online Video Lectures

Requirements for participation:

Intermediate level:

- Programming skills in any object-oriented language
- Knowledge in at least one game engine

Type of exam: Project

Requirements for credit point allocation:

Implementation, Presentation and Documentation of an XR project

Sources:

- Bowman, Doug, et al. *3D User interfaces: theory and practice, CourseSmart eTextbook*. Addison-Wesley, 2004.
- Jerald, Jason. *The VR book: Human-centered design for virtual reality*. Morgan & Claypool, 2015.

Course Name: Perception (winter semester only)

Course language: English / German, translation assistance will be provided

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Thomas Görne, Matthis Menneking

Workload: 150 h	**Lecture hours per week:** 4	**ECTS Credits:** 5

Course objectives:

The course enables the participants to discuss the emotional impact of a film sequence in perception-related.

Contents:

In addition to traditional story-related forms of film analysis the course explains cinematic design codes and techniques by analyzing the physiological principles of perception. By executing psychological (Gestalt Psychology), physiological and neurological theories participants are trained to recognize how technical and artistic means are used in order to achieve particular emotional reactions.

About didactics and workload distribution:

The course starts with a lecturing part by Thomas Görne and Hans-Jörg Kapp and continues with presentations of film scenes analyzed by the participants. The lecturing part will take place in English language. The secondary literature is not completely available in English language, but certain exclusive texts are distributed to the English-speaking students.

Requirements for participation:

Intermediate level: Basic knowledge of film analysis

Type of exam:

Presentation and short report

Requirements for credit point allocation:

regular attendance; successful completion of the exam

Course Name: Short Cut (Film Project)

Course language: English *Screenplay & dialogue likely in German – translation and assistance will be provided

Degree programme:	**Responsible Lecturer(s):**
Media Technology (Bachelor)	Prof. Willaschek, Prof. Dr. Grimm, Prof. Görne

Workload: 240 h	**Lecture hours per week:** Project	**ECTS Credits:** 8

Course objectives:

Students learn to be responsible for their own idea and for the successful completion of a project. As part of a small team, they learn to take responsibility for a team and define a clear role as part of the team.

Along a schedule for the whole semester students will produce their own shot film with support of lecturers and tutors of the laboratories.

Contents:

Starting the semester with a completed script, every student will choose a department to work in the realization of the screenplay. Camera, light & sound department will receive a detailed introduction to the used equipment as well as how to deploy it for storytelling purposes. In a professional postproduction workflow students will learn and use industry standard programs.

About didactics and workload distribution:

- Irregular meetings with groups and departments
- The schedule is distributed at the beginning of the semester and obligatory
- Students are encouraged to follow the schedule or seek out help self-dependent, either from fellow students or staff of the labs.

Requirements for participation:

Intermediate level – students should have completed small film projects.

Students must be able to work on their own as well as with a small team. They are responsible for their own timetable and for the completion of the project.

Type of exam:

Presentation of the end product at the end of the semester.

Requirements for credit point allocation:

Mandatory group meetings according to the schedule.

Successful completion of the defined project and presentation at the end of the semester. As part of a team, the student's role in the project must be clear and they must have a clear part of the presentation.

Sources:

Literature and Manuscripts about Storytelling/Storyboard/Film-Making

Course Name: Sound Design

Course language: English

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Thomas Görne

Workload: 150 h	**Lecture hours per week:** 4	**ECTS Credits:** 5

Course objectives:

Students learn to create film sound designs or to record music (depending on the semester: see below).

Contents:

The course focuses on technical and artistic aspects of sound design. Special emphasis is placed on music production or film sound. Generic topics: critical listening, applied analogue and digital signal processing, applied microphone technique, audio effect units, analog and digital sound synthesis, psycho-acoustic principles, perception of sound, applied room acoustics.

Special topics of music production: sound generation and radiation of musical instruments, basic instrumental recording, music-related stereo and surround techniques, use of filters, equalizers, dynamics and advanced effects, music mixing and editing, artistic principles of classical and pop music production.

Special topics of film sound: location recording, re-recording of dialogue and foleys, film-related stereo and surround techniques, distance perception and acoustical perspective, use of filters, equalizers, dynamics and advanced effects, mixing for TV and film; artistic principles of film sound design.

About didactics and workload distribution:

In the winter semester the main focus of the course is on music production; in the summer semester the main focus is on film sound. The course is held weekly and is accompanied by exercises in the sound lab.

Contact hours: 72 hours

Self-study: 78 hours

Requirements for participation:

Intermediate level: Basic knowledge of recording engineering

Type of exam:

Practical work (i.e., film sound design or music mix), presentation / colloquium

Requirements for credit point allocation:

regular attendance; successful completion of the exam

Advanced courses:

Course Name: Video Technology & Production

Course language: English & German - The introduction to the course and to the video lab is in German; translation support will be provided for non-German speakers. The project work can be in English.

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Dr. Marco Grimm, Martina Hentig, Nathalie Mai

Workload: 150 h	Lecture hours per week: 4	ECTS Credits: 5

Course objectives:

Students will be able to understand and work with different cameras and video equipment. The course has a technical focus, looking at the different technical aspects of filming.

Contents:

The course looks at digital video signals, digital film and television technology, High Definition Systems, equipment technology and studio technology.

About didactics and workload distribution:

This is a lab course with projects that are completed throughout the semester in teams.

Requirements for participation:

Intermediate level: Basic knowledge of video technology

Type of exam:

Oral examination with a presentation of the project completed during the semester.

Requirements for credit point allocation:

Successful completion of the lab projects and regular attendance.

Course Name: Media Design 2

Course language: English

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Ralf Hebecker

Workload: 150 h	Lecture hours per week: 4	ECTS Credits: 5

Course objectives:

Contents:

Media Design 2 is an interdisciplinary and experimental studio in which design-thinking methods are used to develop original media concepts and implement them prototypically. The topics change from year to year. Collaboration with industry and research partners are encouraged and offered frequently.

The course requires a significant level of research, substantial concepts and a reflected and thorough implementation, together with a documentation meeting academic standard.

Current topics are: wearables, alternative eSports with physical components, experimental controllers, the multiplayer-table "Kuti", responsive (learning) environments / spaces, playful learning, and the "Hamburg CO2 Challenge" (with the Hamburg Ministry of Environment, Climate, Energy and Agriculture).

The course welcomes Maik Helfrich, the research assistant at the Games Lab, as a guest. Joint sessions with Games Master students, the games, sound or design lab and other guests are encouraged.

About didactics and workload distribution:

Workshops, classical Seminar

Requirements for participation:

Advanced level: 1-2-page pitch document/project exposé with own project proposal / idea(s) and references. A PDF or website of own projects is invited, but not mandatory.

Type of exam: Exam performance

Requirements for credit point allocation:

Small group or individual project with presentations, Wiki Documentation.

Sources:

Given the broad range of potential projects, sources and literature will be compiled by the students and lecturers according to the topics, teams and project ideas.

Course Name: Media IT Systems

Course language: English

Degree programme:	Responsible Lecturer(s):
Media Technology (Bachelor)	Prof. Dr. Tessa Taefi

Workload: 150 h	Lecture hours per week: 4	ECTS Credits: 5

Course objectives:

The students …
- analyze and define technical requirements for an IT system
- design, implement and test the system iteratively
- explain the reasons for choosing sensors, frameworks, APIs, programming languages, algorithms and communication protocols and technologies
- use the project management method SCRUM to solve a complex technological problem, structure and continuously reflect their approach
- create typical diagrams and visualizations to communicate their approach in a professional and customer-oriented way
- identify, research and fill gaps in their knowledge in a self-initiated way
- Communicate and evaluate their results towards different stakeholder groups

… to create an IT system in the domain of media technology.

Contents:

The goal of the course is to design an IT System related to Media Technology. The systems consist of audio, video, light elements, web servers, sensors and microcontrollers. These are usually connected via IP to and programmed and managed by a media server software – often by TouchDesigner.

Students form agile teams and manage themselves using the agile project management method Scrum. While the overall topic is set, student teams can decide on their own project and specific implementation, often in cooperation with students from the departments design and information.

About didactics and workload distribution:

150 h overall workload (5 ECTS)

- Contact time: Input, feedback, presentations, group work ~ 50 h
- Self-study of video lectures and online resources ~ 20h
- Project work and documentation: ~ 80 h

Requirements for participation:

Advanced level:
- Must be student of an engineering discipline
- Intermediate Programming skills (any language, Python preferred)
- Basic knowledge of implementing Microcontrollers & Sensors
- Good understanding of Audio, Video, Light and Network Technology and related protocols
- Willingness to work self-sufficient and project based in a team

Type of exam: Portfolio

Requirements for credit point allocation:

Collect at least 50% of the overall available points in the portfolio submissions.
The exact point distribution for the portfolio submissions are presented in the first lecture.
These may include
- Presentation of own project work, including developed artefacts and product increment
- Active participation in project work and team sessions
- Active participation in feedback sessions and giving peer review
- Active participation in final project presentation
- Project documentation in video, blog or written forms

Sources:
- HAW Internal online lectures
- Scrum online resources: *https://www.scrum.org/*
- TouchDesigner online resources: *https://derivative.ca/*