

corso di VISUAL EFFECT SUPERVISOR & PRODUCER

1° anno

ATTIVITA' FORMATIVE	AMBITI DISCIPLINARI	SETTORI SCIENTIFICO-DISCIPLINARI	MODULI DIDATTICI	CFU
DI BASE	DISCIPLINE LINGUISTICHE E LETTERARIE	L-FIL - LET/10 LETTERATURA ITALIANA	strutture narrative	2
			metodologia di ricerca e documentazione - art department research 1	2
		L-FIL - LET/11 LETTERATURA ITALIANA CONTEMPORANEA	letteratura e cinema 1	2
	DISCIPLINE STORICHE	M-STO/04 STORIA CONTEMPORANEA	storia e critica del film	4
	DISCIPLINE SOCIOLOGICHE, PSICOLOGICHE E PEDAGOGICHE	SPS/08 SOCIOLOGIA DEI PROCESSI CULTURALI E COMUNICATIVI	il cinema del reale	2
la comunicazione attraverso il suono 1			4	
CARATTERIZZANTI	DISCIPLINE CRITICHE, SEMIOLOGICHE E SOCIO-ANTROPOLOGICHE	M-FIL/04 ESTETICA	estetica dell'opera cinematografica	2
			fondamenti del linguaggio cinematografico 1	2
	DISCIPLINE LINGUISTICHE	L-LIN/12 LINGUA E TRADUZIONE - LINGUA INGLESE	inglese	3
	MUSICA E SPETTACOLO, TECNICHE DELLA MODA E DELLE PRODUZIONI ARTISTICHE	L-ART/05 DISCIPLINE DELLO SPETTACOLO	cinema e arti visive	2
			il processo produttivo degli effetti visivi 1	6
		L-ART/06 CINEMA, FOTOGRAFIA E TELEVISIONE	tracking 2D/3D & match moving	2
	ICAR/17 DISEGNO	storyboard 1	6	
ATTIVITA' FORMATIVE AFFINI O INTEGRATIVE		INF/01 INFORMATICA	modeling 3D	6
LABORATORI, SEMINARI, ATTIVITA' ARTISTICHE, TECNICHE E PERFORMATIVE			tecniche di color	3
			effetti visivi 1	5
			compositing	7
TOTALE CFU				60

NARRATIVE STRUCTURES

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: LINGUISTIC AND LITERARY DISCIPLINES

Disciplinary sector: L-FIL-LET/10 ITALIAN LITERATURE

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: FIRST

Duration: 28 HOURS

Professor(s): FABIO MORICI

OBJECTIVES AND CONTENTS OF THE COURSE

The objective of the course is to provide the basic knowledge of the narrative construction of a film story and beyond: the three-act structure, narrative archetypes, the theme, the character's arc of transformation... The course includes a first theoretical part, assisted by viewing and studying films; and a second practical part, in which students, in teams, write a subject, producing a presentation accompanied by department notes, showing awareness of the narrative function of the various choices made.

PROGRAM

8 lessons of 4 hours each.

Lesson 1 and 2: Fundamentals of storytelling: character, conflict, outer/inner lens, suspense, narrative archetypes, arc of transformation, theme.

Lecture 3 and 4: The three-act structure: hero's journey, ordinary world VS extraordinary, triggering incident, first turning point, midpoint, second turning point; conflict, resolution, climax, catharsis.

Lesson 5 and 6: Movie viewing and commentary based on what was learned.

Lesson 7: Learners, divided into teams, present a pitch for a subject, and receive feedback from the teacher.

Lesson 8: Learners, based on the first feedback, present a first draft of the subject they will bring to the exam, and receive editing from the lecturer.

Reference texts

Dara Marks *"L'arco di trasformazione del personaggio"*

Chris Vogler *"Il viaggio dell'eroe"*

Evaluation procedure:

The examination involves, in the first stage, the submission of a written project via e-mail.

In the second stage, the submitted project is presented during the oral interview with the lecturer.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Basic knowledge of the three-act structure and narrative archetypes; understanding of how each department contributes to the narrative construction of the film.

RESEARCH METHODOLOGY AND DOCUMENTATION -

ART DEPARTMENT RESEARCH 1

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: LINGUISTIC AND LITERARY DISCIPLINES

Disciplinary sector: L-FIL-LET/10 ITALIAN LITERATURE

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: FIRST

Duration: 40 HOURS

Professor(s): GIULIANA PAVESI

OBJECTIVES AND CONTENTS OF THE COURSE

The research goal of the Audiovisual Methodology and Research course is to create new professionals at the forefront of this field. Research is the study of what surrounds us and the heart from which projects slowly take shape.

PROGRAM

The course will intersect with the syllabus of the set design course and will develop a research path functional and preparatory to the selected project of the set design course.

Reference texts

No specific reference texts are provided.

Evaluation procedure:

Presentation of a moodboard by each student and its evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Basis of the theories and techniques of research and documentation in the field of scenography.

LITERATURE AND CINEMA 1

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: LINGUISTIC AND LITERARY DISCIPLINES

Disciplinary sector: L-FIL-LET/11 CONTEMPORARY ITALIAN LITERATURE

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 24 HOURS

Professor(s): FLAVIO DE BERNARDINIS

OBJECTIVES AND CONTENTS OF THE COURSE

The Literature and Cinema 1 module is concerned with the relationship between writing in general and film. These range from the poetic text specially crafted by Marguerite Duras for Alain Resnais in *Hiroshima mon amour*, to dialogues extracted directly from texts written by the historical figures depicted, such as the words of Giuseppe Mazzini taken directly from the character's writings, in Martone's *Noi credevamo*. And then, of course, films taken from literary works, including plays, and finally nonfiction texts, such as journalistic reports, or memoirs and diaries. The goal is thus to sensitize the student to a conception of literature that is explicitly functional to film work, and the ability then to convert into cinematic language all that is writing in the broad and widespread sense just described.

PROGRAM

Kubrick's work on the novels from which his films are based.

Duras's poetic text for Resnais.

The filmic translations of theatrical texts such as Schnitzler's *La ronde* carried out by Ophuls, Coward's *Brief Encounter* for David Lean, or Ronconi/Sanguineti's work on *Orlando furioso* for the television adaptation of the Ariosto poem.

Literary genres and film genres: a comparison.

From investigation to film: *all the president's men* by Alan J. Pakula

From oral narrative to film: Neorealism according to the second preface to Italo Calvino's *The Path of the Spider's Nests*.

Writers as screenwriters: Flaiano and Pinelli for Fellini

The cinema of Luchino Visconti and the literature of the 20th century.

Reference texts

I. Calvino, *Autobiografia di uno spettatore*

G. Rondolino, *Luchino Visconti*, UTET, 2002

Evaluation procedure:

Oral verification at the end of the module.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Ability to evaluate literary and paraliterary writing as a function of filmic transcoding.

HISTORY AND FILM CRITICS

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: HISTORIC DISCIPLINES

Disciplinary sector: M-STO/04 CONTEMPORARY HISTORY

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): FLAVIO DE BERNARDINIS

OBJECTIVES AND CONTENTS OF THE COURSE

As per the attached bibliography, the course aims to address an overview of the history of cinema, predominantly sound, from both historical and critical-aesthetic perspectives.

History, i.e., the course of film art in its first 125 years, and Discourse, i.e., all that cinema has been about and is about, must cohabit as much as possible. The goal is the ability to read a film in the dialectical oscillation precisely between History and Discourse. The method is that of, on the one hand, guided viewing of films or sequences from films, on the other hand, discussion of the material just seen, and the related insights from the point of view of the poetics and socio-cultural contexts implied by the films viewed.

PROGRAM

Guided viewing of sequences from Paisà (Rossellini), L'oro di Napoli (De Sica) : Neorealism and Post-Neorealism.

Guided viewing of Hiroshima, mon amour (Resnais), Vivre sa vie (Godard), sequences from The 400 Blows (Truffaut) : the New Wave and its premises.

Youth, Love and Rage (Richardson), The Servant (Losey): the Free Cinema and its developments.

Tristana (Bunuel) and the poetics of Surrealism.

A Flush of Love (Bergman) and the poetics of Expressionism.

La dolce vita and Il Casanova (Fellini): the Fellini evolution of Neorealism.

L'avventura (Antonioni): art cinema beyond Neorealism

Italian film comedy: sequences from films by Scola, Comencini, Monicelli.

2001:A Space Odyssey, A Clockwork Orange, Barry Lyndon, The Shining, Full Metal Jacket, Eyes Wide Shut (Kubrick) - Stanley Kubrick's cinema as an example of the highest adherence between auteur poetics and film aesthetics.

Rashomon (Kurosawa), The Ceremony (Oshima), sequences from The Tales of the Pale August Moon (Mizoguchi): post-World War II Japanese cinema.

Wild Trails and The Man Who Killed Liberty Valance (Ford): the poetics of the Frontier in classic American cinema

Reference texts

Fernando di Giammatteo, *Storia del cinema*, Marsilio, 1998

Flavio De Bernardinis, *L'immagine secondo Kubrick*, Lindau, 2002

G.C Argan, *La storia dell'arte* (lecturer's handouts)

Evaluation procedure:

Final oral examination.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Ability to read and interpret a film, in the context of the film's reception, both historical and critical-aesthetic.

CINEMA OF REALITY

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: SOCIOLOGICAL, PSYCHOLOGICAL AND PEDAGOGICAL
DISCIPLINES

Disciplinary sector: SPS/08 SOCIOLOGY OF CULTURAL AND COMMUNICATIVE
PROCESSES

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: FIRST

Duration: 16 HOURS

Professor(s): GIANFRANCO PANNONE

OBJECTIVES AND CONTENTS OF THE COURSE

The aim of the Cinema of the Real course is to transfer to students a basic knowledge of the documentary genre by comparing it with fictional cinema referring to reality. The methodological approach is, therefore, to juxtapose a number of historical and more recent documentary films with some fictional films that can be assimilated to cinema of the real, including certain forms of hybridization. This is starting from the elements of distinction that differentiate documentary cinema from fictional cinema in the theoretical sphere. Starting from the "ambiguity of the real," the course will begin with a provocation that director Agnès Varda launched in the early 1960s: "DOCUMENTARE O DOCUMENTIRE?" One "lies" at the moment when the author's gaze is moved by the adoption of a point of view on reality; and it is precisely from here that the face-to-face lectures with students are expected to turn into an active confrontation, which will see the students themselves reflecting on the complex

relationship between cinema and reality. Reasoning, for example, on the legacy of Italian Neorealism or on the communicating vessels between Direct Cinema and New American cinema up to the great American auteurs of the early 1970s, is intended to return students to the kinships and historical links that inevitably unite the past with the present, thus offering an overview of Cinema as a whole.

PROGRAM

During the course, after a necessary introductory part of a theoretical order, including going through the thoughts of film theorists such as André Bazin and Bill Nichols, through the viewing of excerpts from documentary films and also from some fiction films, a discussion will be triggered, finally including the shaping of possible approaches concerning the telling of reality: the interview, the "stalking" of witnesses, "staging," voice over, musical soundtrack, diegetic sound, addressing them from the point of view of direction, photography, sound, editing and, last but not least, production; not forgetting some aspects of a documentary order concerning costumes such as set design, and, finally, special effects.

Reference texts

Required: *Il documentario, l'altra faccia del cinema*, Jean di Breschand (Lindau Editore)

Optional: *E' reale? Guida empatica del cinedocumentarista*, Gianfranco Pannone (Artdigiland Editore)

Introduzione al documentario, Bill Nichols (Castoro Editore)

L'arte dell'ascolto e mondi possibili, Marianella Sclavi (Le vespe)

Reference films:

Paisà, di Roberto Rossellini (episodes napoletano e del Delta padano)

Some Vittorio De Seta's short films: *Parabola d'oro* and *Un giorno in Barbagia*

Le maitre fou, Jean Rouch

I 400 colpi, di Francois Truffaut

The salesman, dei Fratelli Maysles

Welfare e Basic training, di Frederick Wiseman

Faces, di John Cassavetes

Taxi driver, di Martin Scorsese

Dagherréotypes, di Agnès Varda

Etre et avoir, di Nicholas Phlibert

Bowling for Columbine, di Michael Moore

Apocalisse nel deserto, di Werner Herzog

Route one: USA, di Robert Kramer

D'Est, di Chantal Akerman

Elegia, di Aleksandr Sokurov

Two episodes from "*The first person*", di Errol Morris

Latina/Littoria e Sul vulcano, di Gianfranco Pannone

Videocracy, di Erik Gandini

La bocca del lupo, di Pietro Marcello

Notturmo, di Gianfranco Rosi

Close-up. di Abbas Kiarostami

Evaluation procedure:

Written test.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Greater awareness of the potential of film language from reality.

COMMUNICATION THROUGH SOUND 1

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: SOCIOLOGICAL, PSYCHOLOGICAL AND PEDAGOGICAL
DISCIPLINES

Disciplinary sector: SPS/08 SOCIOLOGY OF CULTURAL AND COMMUNICATIVE
PROCESSES

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): SERGIO BASSETTI

OBJECTIVES AND CONTENTS OF THE COURSE

Through the frontal didactic presentation of exemplary segments and clips drawn from the history of cinema and "listening," and the dialectical comparisons and exchanges that can be drawn from them, every resource in the musical and non-musical sound arsenal is analyzed and evaluated: voice then, and then ambient sound, noises and sound effects, and finally music. Of all these fractions, morphology is examined; communicative scope in an informative, expressive, and symbolic sense; narrative effectiveness; impact on spectatorial reception; degree of formal coherence and completeness: in conclusion, their identity in the sonic discourse.

PROGRAM

The course, in its two-year articulation, investigates the forms and methodologies and analyzes the modi operandi adopted in a large number of seminal films that revolutionized or at least redefined the value and functions of cinematic sound.

Reference texts

Michel Chion, *L'audiovisione*, Lindau, Torino 1997

Kathryn Kalinak, *Musica da film. Una breve introduzione*, EDT. Torino 2012

Evaluation procedure:

Oral test at the conclusion of the yearlong period.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

At the end of the annuity, the student should have acquired sufficient skills to deal analytically and critically with listening to the "sound texts" of the film, evaluating their relevance, informative character, connotative valences, symbolic surplus values and possible repercussions on intratextual cohesion.

AESTHETICS OF THE FILM WORK

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: CRITICAL, SEMIOLOGICAL AND SOCIO-ANTHROPOLOGICAL
DISCIPLINES

Disciplinary sector: M-FIL/04 AESTHETICS

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: SECOND

Duration: 16 HOURS

Professor(s): ROBERTO PERPIGNANI

OBJECTIVES AND CONTENTS OF THE COURSE

An in-depth and original analysis of significant filmic examples aimed at identifying the evolution of film aesthetics to fully understand its expressive possibilities.

PROGRAM

Screening of film excerpts taken from the history of cinema from its origins to the present and their analysis aimed at developing in the student the ability to read the language of film.

Reference texts

Evaluation procedure:

Written exam: a short paper on the program conducted.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

To develop in the student the ability to read to then consciously use film language in all its different components.

FUNDAMENTALS OF FILM LANGUAGE 1

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/05 DISCIPLINES OF PERFORMING ARTS

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: FIRST

Duration: 24 HOURS

Professor(s): RENATO MURO

OBJECTIVES AND CONTENTS OF THE COURSE

The first part of the course focuses on the study and analysis of the fundamental elements that characterize film language, with the aim of equalizing the level of knowledge of students from different disciplinary backgrounds.

The second part, on the other hand, focuses on the movement of the camera and its expressive use, through the viewing and in-depth analysis of film sequences, the study of découpage and stylistic, technical and expressive choices, with particular attention to contemporary authors.

During the lectures, the exercises carried out weekly during the Grammar of Filmmaking workshop are also screened, commented on and analyzed.

PROGRAM

The minimal elements of film language.

Frame, framing, scene and sequence.

The scale of fields and planes.

Optics and their expressive use.

The cut, tempo and rhythm.

Orienting the viewer: the 180° rule , matching shots and counter shots.

Scenes with multiple characters, stepping over the field, rules and exceptions.

The off-screen.

The point of view : visual, narrative, ideological.

The movement of the camera.

The fixed frame and internal movement.

The pan: the observer.

The hand-held camera : here and now.

The dolly: the explorer.

Reality breaking into fiction.

The auteur's gaze in contemporary cinema.

Reference texts

L'abc del linguaggio cinematografico - Arcangelo Mazzoleni - Audino Editore

RECOMMENDED

Fuck The Continuity - Miguel Lombardi - Audino Editore - RECOMMENDED

Incontri alla fine del mondo - Werner Herzog - Minimum Fax - RECOMMENDED

L'occhio del regista - Minimum Fax - RECOMMENDED

Note sul cinematografo - Robert Bresson - RECOMMENDED

Evaluation procedure:

On-going assessment.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

At the end of the course, students will have acquired a thorough knowledge of the basics of film language. They will also have developed the ability to analyze a film sequence and understand the expressive and stylistic choices made by the director.

ENGLISH

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: LINGUISTIC DISCIPLINES

Disciplinary sector: L-LIN/12 LANGUAGE AND TRADITION - ENGLISH LANGUAGE

Number of credits: 3 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 72 HOURS

Professor(s): JOANNA KOPPF

OBJECTIVES AND CONTENTS OF THE COURSE

The goal of this course is to provide students with a solid grasp of the English language, both for communicating in film and in more general contexts. The methodology used combines face-to-face teaching, guided exercises and hands-on workshops. Frontal lectures will focus on grammar and vocabulary specific to the film industry, while guided exercises and hands-on labs will help students improve their English listening, reading, writing, and speaking skills.

PROGRAM

The course program includes the following activities:

Lectures on English grammar and syntax, with emphasis on the technical language of the film industry.

Guided exercises to deepen text comprehension, listening and analysis of dialogues and scenes from English-language films and documentaries.

Hands-on workshops in which students will work in groups to write and act out dialogues, presentations and pitches in English related to the world of film and film production.

Viewing and analysis of English-language films and documentaries to familiarize themselves with common vocabulary and expressions used in the film industry.

Role-play exercises and simulations of professional situations in the film industry to help students develop the skills needed to interact effectively in English.

Reference texts

Evaluation procedure:

Final oral examination.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

At the end of the course, students will have acquired the following skills:

Ability to understand and effectively use technical language specific to the film industry in English.

Ability to communicate in English in both professional and informal contexts, with a focus on the world of film and film production.

Proficiency in understanding text and listening to audiovisual materials in English, such as films, documentaries, and interviews.

Writing and presentation skills in English, including project proposals, scripts and pitches.

Ability to work in a team and interact effectively with colleagues and film professionals in English.

CINEMA AND VISUAL ARTS

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/05 DISCIPLINES OF PERFORMING ARTS

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: FIRST

Duration: 16 HOURS

Professor(s): TOMMASO STRINATI

OBJECTIVES AND CONTENTS OF THE COURSE

The teaching is based on the close relationship that can be established between the methodologies and goals of artists of ancient and modern times with film technique and poetics.

The departments that contribute to the making of a film repeat by transforming them the same activities of a painting workshop such as Giotto's in the 14th century.

PROGRAM

Frontal lectures on the art and staging of Giotto, Raphael, Caravaggio, Rembrandt, Tiepolo and Picasso etc. etc. Conversely frontal lectures on great directors, Antonioni, Ferreri, Visconti, Peter Greenaway etc. etc. And their obvious relationship with art in all forms and styles.

Reference texts

- 1) Roma di Sisto V, *Arte e architettura e città fra Rinascimento e Barocco*.
- 2) Il maestro delle imprese di Traiano, Ranuccio Bianchi Bandinelli.
- 3) Man Ray, *The artist and his shadows*, Artur Lubow.
- 4) Picasso, *The self portraits*, Pascal Bonafoux.

Evaluation procedure:

Oral interrogations.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Basic knowledge of various artistic currents and their connection to the cinematic gaze.

PRODUCTION PROCESS OF VISUAL EFFECTS 1

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): DANIELE TOMASSETTI

OBJECTIVES AND CONTENTS OF THE COURSE

It aims to introduce students to visual effects production through understanding the processes involved, from effect conception to final realization and implementation. Students will learn the basics of visual effects production work using specialized software, and will be able to create realistic effects consistent with their surroundings. The course also aims to provide advanced knowledge of the video effects production process, such as 3D modeling, texture creation, and animation of models to create three-dimensional scenes. In addition, students will gain technical and creative skills essential to working in this ever-changing industry, such as budgeting, time management, team collaboration and problem solving. By the end of the course, students will have the skills necessary to create visual effects at the level required within the film industry and professional video production.

PROGRAM

During the first year of the course, students will acquire the essential fundamentals of visual effects production. Emphasis will be placed on knowledge of production techniques, equipment and software used, as well as understanding work processes and mastering the skills necessary to coordinate and manage a VFX production team.

Program content will include:

Introduction to visual effects production: Background, History, Differences between visual effects and 3D graphics.

Pre-production: budget, storyboard, shooting planning, location scouting, visual elements, 3D modeling and animation.

Production: green screen and HDRI shooting, light set-up and compositing.

Post-production: Compositing, Rotoscoping, Keying, Tracking, Matte Painting and Color Correction.

VFX Department Organization.

Editing and finalization of the project.

Lab activities, study sessions and project work are also planned, during which students will develop their technical and creative skills, confronting practical production problems. Guests and industry experts will also be invited to participate in the classes, enriching the training with their experiences and knowledge.

Reference texts

"Introduzione agli effetti visivi digitali", Bryan J. Busch

"Il manuale degli effetti visivi. Vol. 1", Steve Wright

"Computer Graphics: Principles and Practice", James D. Foley et al.

Evaluation procedure:

On-going evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Awareness of how to organize and manage a visual effects project, share files, and communicate with team members.

TRACKING 2D/3D & MATCH MOVING

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 30 HOURS

Professor(s): CHRISTIAN SARAULLO

Prerequisites: GENERAL HINTS OF COMPUTER SCIENCE

OBJECTIVES AND CONTENTS OF THE COURSE

The 2D/3D Tracking & Match Moving course aims to provide students with the knowledge and skills needed to track and reproduce the movement of objects and people in video scenes and to integrate 3D elements into real scenes.

The methodological approach used involves a combination of lectures, guided exercises and hands-on labs. During the lectures, the theoretical principles of 2D/3D tracking and match moving will be presented, while the guided exercises will enable students to become familiar with tracking and match moving techniques through the use of specific software.

Hands-on labs, on the other hand, will provide an opportunity for students to apply the acquired knowledge in real-world situations, working on individual or group projects, and to confront the practical challenges of tracking and match moving.

PROGRAM

- Introduction to 2D and 3D tracking and match moving
- Fundamentals of photogrammetry and tracking point detection
- Using tracking software, such as 3dequalize, nukeX, and PFTrack, to track the movement of objects and people in video scenes
- Using match moving tools to integrate 3D elements into real scenes
- Working with camera and rendering settings to ensure integration of 3D elements consistent with the real scene
- Managing shadows and lighting to achieve a photorealistic result
- Troubleshooting common problems, such as tracking loss and perspective error correction
- Using compositing software, such as Nuke and After Effects, to combine 3D elements with the real scene
- In-depth study of advanced techniques, such as tracking deformable objects and match moving of complex scenes
- Hands-on projects in which students apply the techniques learned to carry out a tracking and match moving project.

Reference texts

Evaluation procedure:

Final examination both written and oral), on-going assessment, project development at H.o.c.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

- Theoretical knowledge of 2D and 3D tracking and match moving techniques.
- Ability to use specific software, such as 3dequalize, PFTrack and Nuke, to perform motion tracking of objects and people in video scenes and to integrate 3D elements into real scenes
- Knowledge of photogrammetry techniques and tracking point detection
- Skill in working with camera and rendering settings to ensure integration of 3D elements consistent with the real scene
- Knowledge of shadow and lighting management techniques to achieve a photorealistic result
- Ability to solve common problems, such as tracking loss and perspective error correction
- Skill in using compositing software, such as Nuke and After Effects, to combine 3D elements with the real scene
- Advanced skills, such as tracking deformable objects and match moving complex scenes
- Ability to work as part of a team to deliver high quality tracking and match moving projects.

Highly sought-after skills in animation, visual effects, film production and advertising. In addition, by acquiring these skills, students will be able to improve their career opportunities and develop their creative and technical skills.

STORYBOARD 1

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: ICAR/17 DRAWING

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): GIUDITTA BETTI

Prerequisites: Good foundation in drawing - Good foundation in art history knowledge -
Basics of Photoshop (not required) - Basics of Blender (not required).

OBJECTIVES AND CONTENTS OF THE COURSE

The course aims to provide students with the basics and skills of Film Pre-Production, thus the stage prior to the making of a film/short, starting from the aspect of ideas and their concreteness in the later stages of production in the film pipeline. The student will be expected to apply themselves with the use of software to express concepts and ideas by interacting with key figures in pre-production and artistic production.

PROGRAM

- Principles of Design.

- Composition and study in terms of tonal values. In-depth analysis and application of film shot composition.
- Basics of cinematography
- Collection of reference and AI (midjourney, etc), how to organize them and how to use them in accordance with professional ethics and European laws.
- Fundamentals of matte painting
- Archetypes and symbolic correlation (Hero's journey, heroine's journey, etc.) application and research
- Semiotics of visible art
- Semiotics of cinema
- Basics of perspective
- Basics of Storyboarding

Reference texts

- L'eroe dai mille volti (Joseph Campbell)
- How to Draw : Drawing and sketching objects and environments from your imagination (Scotto Robertson, Thomas Bertling)
- Light for Visual Artists : Understanding & Using Light in Art & Design

Evaluation procedure:

On-going evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Knowledge of Pre-production Stages.

Knowledge and analysis of images in their symbolic meaning and representation of cinematic key-shots and storyboards effective at pre-production and later VFX production stages.

Knowledge of the fundamentals of visual design and application.

MODELING 3D

Academic Year 2024/2025

Type of training activity: RELATED OR SUPPLEMENTARY EDUCATIONAL ACTIVITIES

Disciplinary field:

Disciplinary sector: INF/01 COMPUTER SCIENCE

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 90 HOURS

Professor(s): CHRISTIAN SARAULLO

Prerequisites: GENERAL HINTS OF COMPUTER SCIENCE

OBJECTIVES AND CONTENTS OF THE COURSE

The 3D modeling course aims to provide students with the necessary skills to create and manage three-dimensional objects of all kinds. The course includes a theoretical part in the classroom where participants will learn the basics of 3D modeling techniques, the necessary drawing tools, and animation and rendering procedures.

Guided exercises will allow students to apply the acquired knowledge in a practical way and learn from their mistakes with the assistance of the lecturers. In this way, they will become more proficient in the software used and proficient in the use of advanced techniques.

The course also includes hands-on workshops, in which students will be required to work in groups to develop complex and high-impact projects. Through the development of multidisciplinary projects, students will discover the creative potential of 3D modeling

software. In addition, the relational and sharing aspects of group work, will be crucial for mutual comparison and growth.

At the end of the course, students will be able to develop customized 3D modeling projects, independently managing each stage of the creative process, from design to actual implementation. In addition, the course aims to foster students' creativity and encourage them to experiment with new solutions in the field of 3D modeling.

The 3D modeling course is aimed at both students and professionals, who are interested in deepening their skills in the digital field. The training provided will give participants access to a wide range of job opportunities, in fields such as architecture, design, film, video games, animation, and multimedia content production. In addition, the course provides an excellent foundation for later in-depth studies in areas such as virtual reality, film, and advertising.

PROGRAM

The 3D modeling course will focus on the techniques and methodologies used to create three-dimensional models using computer graphics software. During the course, students will have the opportunity to acquire fundamental knowledge and skills for creating detailed and accurate three-dimensional models.

Course activities will include a combination of theoretical lectures and practical sessions.

Theoretical lectures will cover topics such as polygonal modeling, curved surface modeling, spline-based modeling, character and object modeling, texture creation, lighting and rendering.

Hands-on sessions will allow students to apply the knowledge gained during theory classes through guided exercises and individual projects. Students will work on 3D modeling software such as Autodesk Maya / houdini depending on class resources and preferences.

Initially, students will work on simple projects, creating basic geometric objects such as cubes, spheres and cylinders. As they become more familiar with the software, exercises will become increasingly complex and challenging, including the creation of detailed objects such as cars, buildings, characters and environments.

During hands-on sessions, students will also learn how to use modeling tools, such as creating basic shapes, editing meshes, creating clean topologies, and texturing. In addition, students will be introduced to lighting and rendering techniques, learning how to create realistic light and shadow effects, as well as the basics of the rendering process.

The course will culminate with the creation of a final project, where students will apply all the knowledge and skills acquired during the course to create a detailed and well-finished 3D model. This final project will provide students with the opportunity to demonstrate their 3D modeling skills and develop a professional modeling portfolio.

In summary, the 3D modeling course will cover a wide range of topics, giving students the opportunity to develop their 3D modeling skills through theoretical lectures and hands-on sessions. Course participants will have the opportunity to acquire basic skills in creating detailed and well-finished 3D models.

Reference texts

Khan academy – pixar in a box

Evaluation procedure:

Final examination both written and oral), on-going assessment, project development at H.o.c.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Knowledge of the basic principles of 3D modeling and its tools, handling meshes, creating basic shapes, adding details and texturing. Introduction to various 3D modeling tools such as Maya, Zbrush, houdini, Adobe Substance painter and others, specifically:

1. Creating objects from scratch or from basic shapes, adding details and texturing.
2. Hints of animation of characters, objects and scenes, using techniques such as keyframe animation, morphing animation and animation rigging.
3. Introduction to principles of lighting and rendering, managing realistic lighting environments, rendering high quality images.
4. Collaboration practices, to work best with other team members in the production of complex 3D projects.
5. Basic principles of 3D production workflow, including project planning, resource management, quality control, and final product delivery.

COLOR TECHNIQUES

Academic Year 2024/2025

Type of training activity: LABORATORIES, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMATIVE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 3 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 60 HOURS

Professor(s): RENATO PEZZELLA

OBJECTIVES AND CONTENTS OF THE COURSE

Knowledge of digital formats, compression systems, color space. Analysis, understanding and management of workflows in the VFX-LAB pipeline. Fundamentals of color management and manipulation in digital systems. DPX & EXR formats. Frontal teaching and guided exercises.

PROGRAM

The course begins with image perception, capture and conversion to digital. What digital format is used in the postproduction pipeline between departments. Color space and resolution. Introduction to color correction, Proprietary Raw formats, Linear and logarithmic curve analysis in video data handling. Interfacing with labs.

Reference texts

The Beginner's Guide to - DaVinci Resolve

Evaluation procedure:

On-going evaluation, project realization.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Extensive knowledge of digital formats, color space. Complete management of formats as needed. Interfacing with external labs.

VISUAL EFFECTS 1

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 5 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): RENATO PEZZELLA

OBJECTIVES AND CONTENTS OF THE COURSE

Approach to the analysis and resolution of special effects intervention requests in previous years' exercises. Verification of solutions adopted and replication exercise. Using frontal teaching and guided exercises.

PROGRAM

The course includes an introduction to compositing software, which will be later implemented by Iatri lecturers, including compositing procedures will analyze the work done by students in the previous course. Starting from the analysis of the footage, with special attention to shooting issues, checking what techniques were used to make the finished product. Objective to recreate the same effect even with different methodologies.

Reference texts

The VES Handbook of Visual Effects

The Narrative Power of Visual Effects in Film

Supplementary materials in Pdf format will be provided to support the lectures

Evaluation procedure:

On-going evaluation, project realization.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Identification of difficulties already in the design phase of the effect, Analysis and identification of optimal procedures for implementation. First approach workflow shooting-delivery.

COMPOSITING 1

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 7 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 1°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): GIOVANNI RICCO

Prerequisites: BASIC KNOWLEDGE OF FILM AND VISUAL EFFECTS, GRAPHICS AND MOTION GRAPHICS SOFTWARE

OBJECTIVES AND CONTENTS OF THE COURSE

Objectives:

An understanding of the importance of the compositor's role and duties within the production system and the relationship with relevant departments.

Learning the main techniques of VFX, from set to post-production.

Practice will enable development and sensitivity to visual composition, attention to detail and "problem solving" skills

Methodology:

The student learns the various techniques individually. He then tackles problems that require the combination of these techniques. These small steps add up to a complete picture that forms the mind and "eye" of the student, causing him to gain confidence in practical performance and a sensitivity to composition and rendering quality production.

PROGRAM

History of VFX

Study and understanding of the figure of the Compositor in the various stages of production (pre-prod, set, post-prod), the relationship with relevant departments, common terminologies used.

VFX intervention categories.

Main techniques (theoretical level)

Nuke software (practical level)

Procedural node system

Setting Comp (colorspace, framerate, aspect ratio in & out)

Rotoscoping

2D - 3D tracking

Keymix

Clean plate and tracker marker removal from greenscreen

Main Chromakey Techniques

Match Color

Match Grain

Reference texts

Evaluation procedure:

Focused exercises on film/television shots provided by the lecturer.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Basic knowledge of Nuke

Basic professional skills of making visual effects

Problem Solving

Teamwork

Knowledge of language and tools.

corso di VISUAL EFFECT SUPERVISOR & PRODUCER

2° anno

ATTIVITA' FORMATIVE	AMBITI DISCIPLINARI	SETTORI SCIENTIFICO-DISCIPLINARI	MODULI DIDATTICI	CFU
DI BASE	DISCIPLINE LINGUISTICHE E LETTERARIE	L-FIL - LET/11 LETTERATURA ITALIANA CONTEMPORANEA	letteratura e cinema 2	2
	DISCIPLINE STORICHE	M-STO/04 STORIA CONTEMPORANEA	analisi dell'opera audiovisiva 1	4
	DISCIPLINE SOCIOLOGICHE, PSICOLOGICHE E PEDAGOGICHE	SPS/08 SOCIOLOGIA DEI PROCESSI CULTURALI E COMUNICATIVI	la comunicazione attraverso il suono 2	2
CARATTERIZZANTI	MUSICA E SPETTACOLO, TECNICHE DELLA MODA E DELLE PRODUZIONI ARTISTICHE	L-ART/05 DISCIPLINE DELLO SPETTACOLO	fondamenti del linguaggio cinematografico 2	2
		L-ART/06 CINEMA, FOTOGRAFIA E TELEVISIONE	il processo produttivo degli effetti visivi 2	6
			dinamics & particle effects 1	6
		ICAR/17 DISEGNO	storyboard 2	6
ATTIVITA' FORMATIVE AFFINI O INTEGRATIVE		INF/01 INFORMATICA	lighting & rendering 1	6
LABORATORI, SEMINARI, ATTIVITA' ARTISTICHE, TECNICHE E PERFORMATIVE			effetti visivi 2	10
			compositing 2	7
			shooting	4
			organic modeling 3D & texturing 1	5
TOTALE CFU				60

LITERATURE AND CINEMA 2

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: LINGUISTIC AND LITERARY DISCIPLINES

Disciplinary sector: L-FIL-LET/11 CONTEMPORARY ITALIAN LITERATURE

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 16 HOURS

Professor(s): FLAVIO DE BERNARDINIS

OBJECTIVES AND CONTENTS OF THE COURSE

The course continues the objectives and methodology of the previous Literature and Cinema 1, with a focus on issues of seriality, both in cinema, such as 007, and outside theatrical fruition, today's platforms.

PROGRAM

Ian Fleming and cinema

Comics and cinema

Reference texts

Q.Tarantino, *Cinema Speculation*, La Nave di Teseo, 2023 (mandatory)

Evaluation procedure:

Oral verification at the end of the module.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Ability to identify and handle the structures of seriality and intertextuality related to the socio-cultural field of so-called postmodernism.

ANALYSIS OF AUDIOVISUAL WORK 1

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: HISTORICAL DISCIPLINES

Disciplinary sector: M-STO/04 CONTEMPORARY HISTORY

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 84 HOURS

Professor(s): FLAVIO DE BERNARDINIS

OBJECTIVES AND CONTENTS OF THE COURSE

The module Analysis of Audiovisual Work 1 includes the teaching objective of leading the student to the ability to view an audiovisual work (film, series, program, format), analyze it in its constituent elements, synthesize it from a historical and critical point of view, and publicly display the material conceived and produced.

The teaching method, therefore, follows these objectives through analysis and discussion of selected audiovisual texts, as per the syllabus.

Under iconography, socio-historical content, pertaining to the collective psyche of a given geopolitical area, is understood to be included.

PROGRAM

In keeping with the didactic module of Film History and Criticism 1, the program will first include the exercise under Objectives and Methodology applied to the iconographic system of Kubrickian cinema.

Kubrickian cinema, in terms of iconography, is in fact founded on the structural dialectic of certain macro-figures that the student must identify and analyze.

Elements of iconography of early cinema, Griffith, Ejsenztein, Vidor, Murnau. Lang, Pudovkin.

The same exercise applies to the cinema of Bunuel, in which the iconographic system refers to the poetics of Surrealism, and to the cinema of Bergman, which draws on Expressionism, and the cinema of John Ford, for the iconography of the Frontier, and Hitchcock, for the cinema of modern..

Elements of iconography in Italian cinema, from Neorealism to the 2000s.

Iconography in the cinema of Lynch, Nolan, Aster, Aronovsky.

Special attention is paid to Eastern cinema (Chinese, Japanese and Korean), in which the iconographic component is an integral part of the filmic structure.

Introduction to iconography in documentary filmmaking and seriality.

Reference texts

Lucio Caracciolo, *La pace è finita*, Feltrinelli

G.C.Argan, *Storia dell'arte moderna 1770-1970*, Sansoni 1973

Evaluation procedure:

Oral verification at the end of the module.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Ability to structurally analyze from an iconographic and consequently narrative point of view an audiovisual text.

COMMUNICATION THROUGH SOUND 2

Academic Year 2024/2025

Type of training activity: BASIC

Disciplinary field: SOCIOLOGICAL, PSYCHOLOGICAL AND PEDAGOGICAL
DISCIPLINES

Disciplinary sector: SPS/08 SOCIOLOGY OF CULTURAL AND COMMUNICATIVE
PROCESSES

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 36 HOURS

Professor(s): SERGIO BASSETTI

OBJECTIVES AND CONTENTS OF THE COURSE

Through the frontal didactic presentation of exemplary segments and clips drawn from the history of cinema and "listening," and the dialectical comparisons and exchanges that can be drawn from them, every resource in the musical and non-musical sound arsenal is analyzed and evaluated: voice then, and then ambient sound, noises and sound effects, and finally music. Of all these fractions, morphology is examined; communicative scope in an informative, expressive, and symbolic sense; narrative effectiveness; impact on spectatorial reception; degree of formal coherence and completeness: in conclusion, their identity in the sonic discourse.

PROGRAM

The course, in its two-year articulation, investigates the forms and methodologies and analyzes the *modi operandi* adopted in a large number of seminal films that revolutionized or at least redefined the value and functions of cinematic sound.

Reference texts

Michel Chion, *L'audiovisione*, Lindau, Torino 1997

Kathryn Kalinak, *Musica da film. Una breve introduzione*, EDT. Torino 2012

Evaluation procedure:

Oral test at the conclusion of the yearlong period.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

At the end of the annuity, the student should have acquired sufficient skills to deal analytically and critically with listening to the "sound texts" of the film, evaluating their relevance, informative character, connotative valences, symbolic surplus values and possible repercussions on intratextual cohesion.

FUNDAMENTALS OF FILM LANGUAGE 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/05 DISCIPLINES OF PERFORMING ARTS

Number of credits: 2 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: SECOND

Duration: 20 HOURS

Professor(s): RENATO MURO

OBJECTIVES AND CONTENTS OF THE COURSE

The second year of the Fundamentals of Cinematographic Language course focuses entirely on the study and analysis of camera movement from stylistic, technical and expressive perspectives. Unlike the first year, the approach becomes more technical and complex, with a special look at the relationship between language and technology and making use whenever possible of the contribution of professionals in the field (steadycam and ronin operators, storyboard artists, vfx supervisors, directors, etc.)

As usual, the exercises carried out weekly during the Grammar of Directing 2 workshop are projected, commented and analyzed during the lectures.

PROGRAM

- The previsualization and storyboard
- The use of VFX
- Complex dollies and mixed movements
- The steadycam
- Electronic stabilization systems, gimbals, and remote heads
- Dollies and cranes
- Aerial filming and the drone

Reference texts

L'ABC della regia -Daniel Arijon - Audino Editore - RECOMMENDED

Il movimento della macchina da presa - Arcangelo Mazzoleni - Audino Editore -
RECOMMENDED

Storia degli Effetti speciali - Giovanni Toro – RECOMMENDED

Evaluation procedure:

On-going evaluation

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

By the end of the course, students will have acquired a thorough knowledge of technical and expressive tools and developed the ability to analyze and deal with complex staging situations.

PRODUCTION PROCESS OF VISUAL EFFECTS 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): DANIELE TOMASSETTI

OBJECTIVES AND CONTENTS OF THE COURSE

Deepen and broaden students' knowledge of visual effects production. In particular, the course will focus on understanding working processes and the ability to create realistic effects that are consistent with their surroundings. Students will gain advanced skills in 3D modeling, texture creation, and model animation to create increasingly complex three-dimensional scenes. In addition, the course will provide technical and creative knowledge essential to working in this ever-changing field, such as budgeting, time management, team collaboration, and problem solving. By the end of the second-year course, students will be able to create visual effects at the level required by the professional film and video production industry, and will be able to collaborate effectively with other professionals in the field.

PROGRAM

During the second year of the course, students tackle the more advanced tasks of visual effects production and consolidate knowledge of the basics set in the previous year. Their technical and team management skills are strengthened through workshops, tutorials and complementary study activities.

The program includes the following content:

Advanced visual effects design.

Visual stories and styles.

Development of new visual effects software.

Production of animated and static visual elements for commercials, films and videos.

Programming of functions needed for visual effects with specialized software.

Composition and rendering of visual effects.

Directing assistance during filming.

VFX department organization, team management and set supervision.

Project work sessions.

Special attention will also be given to preparation for working life and presentation of one's work in the professional field, with training sessions devoted to portfolio creation, project presentation, and networking techniques.

The second-year program aims to consolidate knowledge of visual effects production processes, but also to expand students' technical and creative skills. In addition, students will develop more self-management and teamwork skills, which are necessary for the independent management of a visual effects production project.

In addition, students will gain insights into virtual production, XR and AR. These technologies are in high demand today by major visual effects companies and enable the creation of imaginary environments and the full realization of exclusive and innovative productions.

Reference texts

"Il manuale degli effetti visivi. Vol. 2", Steve Wright

"The Art and Science of Digital Compositing", Ron Brinkmann

"Foundations of Computer Graphics, fourth edition", John F. Hughes et al.

Evaluation procedure:

On-going evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Improved technical and application knowledge of VFX, particularly in character animation, special effects creation, and integration of live-action or CG elements;

Advanced skills in designing and managing VFX production workflows, learning how to coordinate team work and manage delivery schedules;

In-depth knowledge of more advanced 3D animation and modeling tools, such as ZBrush and Houdini;

Hands-on experience in client management and study of VFX budgets, essential requirements for working in a professional environment.

DINAMICS & PARTICLE EFFECTS 1

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 80 HOURS

Professor(s): IVAN BROGNA

OBJECTIVES AND CONTENTS OF THE COURSE

DINAMICS & PARTICLE EFFECTS 1 course aims to teach students how to create animations and special effects involving particles, such as smoke, fire, water, snow, explosions, and more. Students will learn how to use the most common animation and SFX software to create visually compelling and realistic effects. The course will emphasize the importance of good planning, an understanding of basic animation, techniques for creating fluid motion, and the use of advanced tools for three-dimensional particle simulation and rendering. Upon completion of the course, students will be able to create animations and particle effects for their productions, and better adapt to the demands of the animation and SFX job market.

PROGRAM

One type of program of particular relevance to the Dynamics & Particle Effects 1 course in the area of visual effects is physics and dynamics simulation software. This type of program allows you to model and animate the physics of objects, liquidity, and particles, creating visual effects of high quality and realism. Some of the most common programs include:

Autodesk Maya: This 3D modeling program is widely used in the visual effects industry, especially for creating special effects. It has advanced tools for animation and physical simulation, including built-in particle systems.

Houdini FX: This visual effects software has a wide variety of tools for physical simulation, such as fluid and particle simulations. It also has a nodal approach to creating animations, which allows complex effects to be created efficiently.

RealFlow: This fluid simulation program is widely used in the visual effects and animation industry. It uses advanced algorithms to simulate the behavior of water, fire and other elements, with great attention to detail.

Blender: this 3D modeling and animation software is popular among independent artists and small productions. It has tools for simulating particles and fluids to create high-quality visual effects.

Cinema 4D: This 3D graphics program offers a wide range of tools for modeling, animation and physical simulation. It has a built-in particle system and many plugins to extend the software's functionality.

In conclusion, physical and dynamic simulation software is essential for creating high-quality visual effects. These programs offer artists a wide variety of tools for modeling, animation, and simulation of particles, liquids, and other elements, allowing them to create spectacular and realistic effects.

Reference texts

"Realistic Explosions Using Massively Parallel Fluid Dynamics Simulation" by Nils Thürey, Tamar Shinar, and Markus Gross. This scholarly article describes the use of computational

fluid dynamics (CFD) simulations to achieve very realistic explosions in film and video games.

"Learning Autodesk Maya 2015: Dynamics" by Prof. Sham Tickoo. This textbook covers many of the dynamics techniques and tools found in Maya software, which is one of the most widely used tools in the Visual Effects industry.

"The Art and Science of Digital Compositing" by Ron Brinkmann. This book covers many aspects of the compositing process, including those related to integrating dynamic parts (such as particles, smoke, fire) within a scene.

"Mastering Fluid Mechanics" by William J. Devenport. This textbook covers fluid dynamics in general, but can provide a good theoretical basis for understanding how particle and fluid simulations work.

"Particle-Based Fluid Simulation for Interactive Applications" by Matthias Müller, David Charypar, and Markus Gross. This scientific article describes a particle-based fluid simulation technique that may be useful for understanding some particle animation techniques.

Evaluation procedure:

Evaluation in itinere, through the implementation of projects.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Know the principles of fluid dynamics to create simulations of moving liquids such as water, lava or smoke. Learn how to use particle systems to create special effects such as fireworks, explosions or falling snow. Use techniques for setting up simulations and simulating physical forces to create realistic effects such as gravity, friction and pressure. Learn how to handle object interactions and particle collision simulation to create effects such as the effect of

debris in a traffic accident or a ball bouncing off a wall. Learn to use lighting and rendering techniques to easily integrate generated effects with 3D scenes and photorealistic renderings.

Develop knowledge of animation, production workflows and advanced techniques for creating special effects, gaining hands-on experience in managing Visual Effects production projects.

STORYBOARD 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: ICAR/17 DRAWING

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 60 HOURS

Professor(s): GIUDITTA BETTI

OBJECTIVES AND CONTENTS OF THE COURSE

The goal of the course is to prepare and provide students with the basics of the anatomy of drawing and application in the 3d environment.

The same topics as in the previous year will be covered going on to improve artistic and design performance.

PROGRAM

- Human Anatomy
- Animal Anatomy
- Character design
- Creature design

- Matte painting (advanced)

- World building

Reference texts

Texts will be suggested later by the teacher.

Evaluation procedure:

On-going evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Knowledge of human anatomy, and understanding of aspects of concept art.

Basic realization and understanding of character and creature design concepts

LIGHTING & RENDERING 1

Academic Year 2024/2025

Type of training activity: RELATED OR SUPPLEMENTARY EDUCATIONAL ACTIVITIES

Disciplinary field:

Disciplinary sector: INF/01 COMPUTER SCIENCE

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): VALERIO DONATI

OBJECTIVES AND CONTENTS OF THE COURSE

In this course, all techniques for professional production of photorealistic renderings will be taught, from the correct import of 3D models to the most advanced texturing and lighting techniques. Study and rendering of the most advanced materials in renderings aimed at cinematic photorealism.(frontal teaching, guided exercises).

PROGRAM

Continuing from proper modeling and topology to create a scene composition, creation of materials until the final render. The main objective of the course is the acquisition of the correct working methodology, relying for the most part on practical exercises, so that the knowledge learned can be applied immediately.

Reference texts

Evaluation procedure:

On-going evaluation, project implementation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

This course provides solid knowledge on the process of image production up to an intermediate level, allowing a systematic and in-depth approach to the proper use of resources to consolidate and make the working method more efficient.

VISUAL EFFECTS 1

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 10 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): RENATO PEZZELLA

OBJECTIVES AND CONTENTS OF THE COURSE

Preliminary meetings with other departments on effect requests. Analysis and resolution of interventions referring to requested special effects. On-set supervision of filming and implementation of effects. until final approval. Using guided exercises.

PROGRAM

Course now involves taking assignments to interface with other department heads, analysis and on-set supervision of effects. Pipeline management for implementation of requests version management and obtaining final approval. Under the tutelage of the instructor.

Reference texts

The VES Handbook of Visual Effects

The Narrative Power of Visual Effects in Film

Supplementary materials in Pdf format will be provided to support the lectures

Evaluation procedure:

On-going evaluation, project realization.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Identification of difficulties already in the design phase of the effect, Analysis and identification of optimal procedures for implementation. Comprehensive shoot-delivery workflow management.

COMPOSITING 2

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 7 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): GIOVANNI RICCO

OBJECTIVES AND CONTENTS OF THE COURSE

Objectives:

Understanding of the importance of the compositor's role and duties within the production system and the relationship with relevant departments.

Practice will enable the development and sensitivity to visual composition, attention to detail and "problem solving" skills

Practice and collaboration with the school's various departments will implement the student's training on and off the set.

Methodology:

The student consolidates the various techniques learned the previous year and learns new ones. He addresses issues that require the combination of these techniques through vfx made for the school's shorts.

PROGRAM

Analysis advanced compositing techniques

3D tracking

Advanced removal and chromakey techniques

3D beauty

3D exr integration

3D fbx integration and texture application

Reference texts

Evaluation procedure:

Focused exercises, vfx realization for short films.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Improved knowledge of Nuke

Improved professional skills of visual effects realization

Problem Solving

Teamwork and cooperation between departments

Use of language and tools

SHOOTING

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 40 HOURS

Professor(s): RENATO PEZZELLA

Prerequisites: Basic computer skills and excellent command of PC use.

OBJECTIVES AND CONTENTS OF THE COURSE

The Virtual Production course is spirited and designed based on Epic Games' highly successful "Fellowship on Virtual Production" program, in which the very first steps in learning virtual production are directed toward learning most of the general systems in the engine. The "Virtual Production shooting" course provides VFX students with a solid general knowledge of the engine necessary to progress into the more specific concepts and dedicated workflows of the later stages. The structure of our learning path is divided into phases and steps. (frontal teaching, guided exercises).

PROGRAM

"Virtual Production" is the set of techniques, technologies and workflows applied to the visual effects industry that enable interactive, real-time production. Unreal Engine is at the forefront of virtual production being the software that drives and coordinates: real-time rendering and interaction, LED wall and multi-screen displays, camera tracking, performance and motion capture, VR editing and scouting.

Reference texts

Evaluation procedure:

On-going evaluation, project evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

The course therefore aims to professionally train a person with knowledge of the fundamentals of virtual production in real time.

ORGANIC MODELING 3D & TEXTURING 1

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 5 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 2°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): DIANA BRANCA

Prerequisites: Basic computer skills and excellent command of PC use. Knowledge of at least one 3D software

OBJECTIVES AND CONTENTS OF THE COURSE

In this course we proceed with modeling rules this time also putting in the middle the utilization of reference images (References) and directly 3D models to reconstruct (Retopology). All those topics designed to provide a solid foundation on the main functionality and potential of the software, with special emphasis on its use in digital sculpture, are covered in a comprehensive and detailed manner. (frontal teaching, guided exercises).

PROGRAM

Will cover the main sculpting and texturing techniques for creating a Humanoid, analyzing and respecting its anatomical and muscular canons. Blockout: concept import Sculpt Rough head Body modeling Reproject and Detail Modeling hair and fur.

Reference texts

Evaluation procedure:

On-going evaluation, project implementation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Knowledge of the various production modes and techniques for the creation of a complete character that can be used in various professional fields.

corso di VISUAL EFFECT SUPERVISOR & PRODUCER

3° anno

ATTIVITA' FORMATIVE	AMBITI DISCIPLINARI	SETTORI SCIENTIFICO-DISCIPLINARI	MODULI DIDATTICI	CFU
CARATTERIZZANTI	MUSICA E SPETTACOLO, TECNICHE DELLA MODA E DELLE PRODUZIONI ARTISTICHE	L-ART/05 DISCIPLINE DELLO SPETTACOLO	Analisi dell'opera audiovisiva 2	3
		L-ART/06 CINEMA, FOTOGRAFIA E TELEVISIONE	Il processo produttivo degli effetti visivi 3	6
			Organic Modeling 3D & texturing 2	4
			Dinamics & particle effects 2	4
		ICAR/17 DISEGNO	Concept art & Production Design	6
ATTIVITA' FORMATIVE AFFINI O INTEGRATIVE		INF/01 INFORMATICA	Lighting & rendering 2	6
LABORATORI, SEMINARI, ATTIVITA' ARTISTICHE, TECNICHE E PERFORMATIVE			Compositing 3	8
			stage o idoneità sostitutiva laboratorio	11
PROVA FINALE			Effetti visivi 3 – showreel	12
TOTALE CFU				60

ANALYSIS OF AUDIOVISUAL WORK 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/05 DISCIPLINES OF PERFORMING ARTS

Number of credits: 3 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 64 HOURS

Professor(s): FLAVIO DE BERNARDINIS

OBJECTIVES AND CONTENTS OF THE COURSE

In continuity with the module Analysis of the Audiovisual Work 1, the module Analysis of the Audiovisual Work 2 focuses on defining the works most directly belonging to the tradition of the European avant-garde or nouvelle vagues, such as New Hollywood, or the Eastern European schools, such as Lodz and Soviet cinematography from Kalotozov's *When Storks Fly onward*. Ideological codes will be a subject of discussion for the student, who must emphasize the ability to extract ideological structures from the texts examined.

PROGRAM

Soviet Cinema of the Thaw

The Polish School of Lodz

Hungary and Czechoslovakia: Jancso, Stvabo and Forman

Brazilian cinema novo

The New Hollywood: Scorsese, Spielberg, Coppola, Lucas, De Palma, Pakula, Penn,
Rafeloso

The British in Hollywood: Schlesinger and Reisz

The Italian New Wave: The Taviani Brothers, Bertolucci, Bellocchio

Required texts

F.Di Giammatteo, *Storia del cinema*, Marsilio, 1998

F.Di Giammatteo, *Lo sguardo inquieto*, La Nuova Italia, 1995

Evaluation procedure:

Oral verification at the end of the module.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Know how to identify and extract ideological structures from the texts examined.

PRODUCTION PROCESS OF VISUAL EFFECTS 3

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): DANIELE TOMASSETTI

OBJECTIVES AND CONTENTS OF THE COURSE

Have a thorough understanding of the visual effects production workflow and its processes.

Gain skills in budget management for visual effects production.

Understand the importance of budget planning in high-quality visual effects production.

Develop skills in supervising and managing budget monitoring.

PROGRAM

Project analysis: the first step is to understand exactly what the project needs are and what visual effects will be required. You will also need to estimate the number of scenes that will require visual effects, as well as the duration of each.

Cost estimation for each visual effect: Once the requirements have been established, one must go on to estimate the cost of each individual visual effect. This can be done based on

the complexity of the effect itself, the amount of hours required to create it, and whether or not special equipment is needed.

Estimating the hours needed: once the cost for each effect has been calculated, it is then necessary to calculate the number of hours needed to create it. This will help to understand how long it will take to complete a visual effect and what the hourly labor costs will be.

Estimating personnel costs: as mentioned, the hourly estimate for personnel is critical to the overall budgeting of the project. At this stage, the hourly rates of the professionals involved in the work, including artists, animators, technicians, and other staff, must be considered.

Estimating the cost of providing software and hardware: visual effects often require the use of specialized software and hardware. Therefore, it is necessary to consider the costs of providing or purchasing such tools.

Final budget calculation: with all these elements in hand, you can proceed with the final budget calculation and make any adjustments to balance all the items involved. One must then be sure to consider a contingency reserve for any problems or unforeseen contingencies.

Cost monitoring: It is essential to monitor costs during the production of visual effects to make sure that everything is proceeding according to the established pattern. This way any problems that may arise along the way can be promptly addressed.

Reference texts

"Digital special effects: animations, models and tricks for film and video games" by Giuseppe Buzzanca

"VFX Fundamentals: Visual Special Effects Using Fusion 8.0" by Wallace Jackson

"Physically Based Rendering: From Theory to Implementation" by Matt Pharr et al.

Evaluation procedure:

On-going evaluation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Understand the importance of VFX budgets in film productions.

Know the different types of VFX budgets and know how to choose the most appropriate one for your project.

Become familiar with VFX production budget management tools and techniques, including specialized software and cost analysis methods.

Know how to define and plan the activities and resources required for visual effects production, ensuring that time and money constraints are met.

Know how to negotiate with clients, financiers and VFX service providers to optimize value for money and ensure maximum efficiency in budget management.

Know how to evaluate the financial impacts of creative and technical decisions made during visual effects production.

Develop data analysis and reporting skills to monitor the VFX production budget in real time and prevent possible risk situations.

Know how to work as part of a team with other VFX professionals, collaborating to define and achieve production goals.

Acquire customer relationship management skills, ensuring maximum client satisfaction and guaranteeing the creation of a quality product.

Know how to analyze the VFX market and constantly monitor technological innovations and trends while maintaining high standards of quality and competitiveness.

ORGANIC MODELING 3D & TEXTURING 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 80 HOURS

Professor(s): DIANA BRANCA

Prerequisites: Basic computer skills and excellent command of PC use. Knowledge of at least one 3D software

OBJECTIVES AND CONTENTS OF THE COURSE

Learn the import of a 3D scan and the process of retouching and mesh correction. The student will be accompanied in the creation of human characters, fantasy creatures, architecture, vehicles and props declined in settings of all types and natures. The methodology employed is inspired by traditional art and is entirely based on interaction with the subject matter, albeit digital, as well as on the search for a consistent yet original artistic style. (frontal teaching, guided exercises).

PROGRAM

Will cover the main sculpting and texturing techniques for creating a model, delving into the texturing part with the use of Noise Makers and Texture Painting and the creation of complex photorealistic materials.

Reference texts

Evaluation procedure:

On-going evaluation, project implementation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

The course therefore aims to professionally train a person in creating very complicated sculptures. Once the course is completed one is in fact able to become a 3D modeler or 3D concept artist, figures that are increasingly in demand by many companies.

DINAMICS & PARTICLE EFFECTS 2

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC PRODUCTION TECHNIQUES

Disciplinary sector: L-ART/06 CINEMA, PHOTOGRAPHY AND TELEVISION

Number of credits: 4 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 40 HOURS

Professor(s): IVAN BROGNA

OBJECTIVES AND CONTENTS OF THE COURSE

The Dynamics & Particle Effects 2 course is an advanced module that focuses on learning advanced techniques and tools for creating dynamic and particle visual effects. The objectives of the course are:

Deepen knowledge of particle physics and particle interactions, such as gravity and magnetic attraction.

Use advanced simulation software to create realistic and detailed dynamic and particle effects, such as explosions, smoke, water and fire.

Integrate particle and dynamic effects into visual effects projects, such as 3D animations and films.

Develop the ability to solve complex problems related to the creation of dynamic and particle visual effects.

To achieve these goals, the course adopts a hands-on learning methodology, including the use of advanced simulation software and the creation of realistic projects for exercises. Students will be guided through the process of creating visual effects, from design to final production, through the coaching of expert tutors in the field. In addition, the course also includes theoretical lectures to deepen knowledge of the tools and techniques used in the creation of dynamic and particle visual effects. At the end of the course, participants will be able to create high-quality visual effects and use the acquired skills in professional visual effects projects.

PROGRAM

The Dynamics & Particle Effects 2 course is designed to deepen the skills acquired during the first year of the course and to introduce more advanced and complex topics in the field of Visual Effects. The course program can be summarized in the following points:

Expansion of knowledge of physics and fluid mechanics for the creation of water environment effects, creation of waves, splashes, foams and the like.

Deepening of knowledge not usually applied in the subject of fluids, such as the use of advanced modeling techniques, rigid and deformable objects, deformable surfaces, etc.

The study of special scenarios such as particle control in crime simulation, object deletion on complex scenarios, integration of 3D modeling and texture painting.

Production of a weather system using Houdini, where dripping rain particles will be created by creating a dynamic cable mesh and placing the particles in certain positions.

Development of technologies in 3D editor for simulation of terrain impacts through the use of pre-existing assets, distance-dependent textures and frame rate optimization.

The study of the Unity 3D software game engine from the perspective of real-time scene simulation.

The creation of an interface for optimizing particle effects with a group of operators.

The specific use of the Redshift renderer for producing atmospheres and cloud effects.

The Dynamics & Particle Effects 2 course is designed for students who have already mastered the basics of Visual Effects and wish to increase their skills in advanced simulations. The training in this course will enable participants to develop a new understanding in their approach to the work and study of visual effects, offering a more professional and comprehensive view.

Reference texts

"Physics for Game Developers" by David M. Bourg and Bryan Bywalec - this text provides a solid introduction to particle physics and fluid dynamics simulations.

"Real-Time Collision Detection" by Christer Ericson - this text is a must-read for anyone who is designing games or facing problems with collisions or real-time physical interactions.

"Introduction to Fluid Mechanics" by Yasuki Nakayama - this text provides a comprehensive guide to fluid dynamics that can be applied to particle simulations.

"Computer Simulation of Flow and Heat Transfer" by Bob Lockwood - this text provides a comprehensive overview of fluid simulation and heat transfer.

In addition, there are also many tutorials and online resources available that can be helpful in enriching students' knowledge on this topic.

Evaluation procedure:

Evaluation in itinere, through the implementation of projects.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Advanced understanding of dynamics and particle concepts in order to create spectacular and realistic effects.

Advanced knowledge of particle and material interactions, optimization of semantic solutions, and creation of advanced simulation systems.

Advanced skills in managing visual effects for movies, games, apps or VR environments.

Knowledge of keyframe animation and motion graphics techniques.

Advanced knowledge of rendering and compositing techniques.

Ability to use advanced tools such as Maya, Houdini, and Nuke.

Expert in creating special effects, light, fire, smoke, water, snow, and other physical effects.

Overall, the DINAMICS & PARTICLE EFFECTS 2 course will prepare students to authentically tackle planning, researching, and creating advanced visual effects at the professional level, elevating their skills to advanced levels.

CONCEPT ART & PRODUCTION DESIGN

Academic Year 2024/2025

Type of training activity: CHARACTERIZING

Disciplinary field: MUSIC AND PERFORMING ARTS, FASHION AND ARTISTIC
PRODUCTION TECHNIQUES

Disciplinary sector: ICAR/17 DRAWING

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 60 HOURS

Professor(s): PIETRO NUME

OBJECTIVES AND CONTENTS OF THE COURSE

To train professionals capable of bringing fantastic and realistic worlds to life through the production of concept art; to provide theoretical and practical skills in the design and realization of settings, characters, objects and set design elements; to develop the ability to use the most advanced digital techniques and tools used in Concept Art and Production Design; to acquire knowledge in screenwriting and storytelling techniques to create coherent projects with a strong visual impact; to collaborate with creative production teams in order to develop teamwork skills for the realization of film, television, video game and animation projects. The ultimate goal of the course is to train professionals capable of transforming ideas into concrete projects with a unique and coherent visual identity.

PROGRAM

The Concept Art & Production Design course is the ideal path for those who want to immerse themselves in the world of art, design and production in the field of digital entertainment. The course will be divided into three main modules, each focusing on a specific area of study.

The first module of the course, titled "Fundamentals of Art and Design," will focus on the theory and practice of art and design. Students will be introduced to different artistic techniques, the basics of planning and drawing, as well as the fundamental principles of color, composition and perspective. This module plays a key role in introducing students to the world of Concept Art and Production Design.

The second module, titled "Concept Art," will focus on concept art and the creation of characters and settings for video games, animations and films. Students will have the opportunity to acquire the skills needed to create engaging visual stories, striking images and functional designs through freehand drawing, digital modeling and rendering.

In the final phase of the course, the third module, entitled "Production Design," will provide students with the basics of production design, or the set of processes aimed at creating sets, costumes and art objects for film, animation and video games. Participants in the course will be introduced to the techniques used by industry professionals to create settings, sets, vehicles and weapons useful in the creation of a finished product.

In general, the course will involve an interactive, practice-based formula; the lectures will be supplemented by workshops and thematic insights. Each class will feature a collaborative learning experience that will provide students with an overview of the various stages of developing a concept art and production design project. Course participants will be able to acquire the skills and knowledge necessary to pursue a career in the world of digital art and design, ensuring their future employment in an ever-changing field.

Reference texts

"The Art of Pixar: The Complete Color Scripts and Select Art from 25 Years of Animation",

Amid Amidi

"The Skillful Huntsman: Visual Development of a Grimm Tale at Art Center College of Design", Felix Yoon, Khang Le, Mike Yamada

"The Art of Star Wars: The Force Awakens", Phil Szostak

"Frank Frazetta: Icon", Frank Frazetta

"The Art of Game of Thrones", Deborah Riley, Jody Revenson

"The Art and Making of Pacific Rim", David S. Cohen

"The Art of Halo 5: Guardians", Martin Robinson

"Film Art: An Introduction", David Bordwell, Kristin Thompson

Evaluation procedure:

Identification test: ask students to identify the techniques and styles of conceptual and production art.

Matching test: ask students to match Concept Art & Production techniques to their corresponding examples.

Completion test: students should complete sentences or definitions related to Concept Art & Production theory.

Multiple choice test: students should answer some multiple choice questions about Concept Art & Production theory and techniques.

Drawing test: students could be asked to draw an image using Concept Art & Production techniques.

Analysis test: students might be asked to analyze a Concept Art & Production project and provide constructive criticism.

These are just a few examples of tests that could be used. The type of test depends on the specific objective of the course and the skill levels of the students involved.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Knowledge of 3D drawing, painting, and modeling techniques for creating fantasy and science fiction characters, environments, and objects.

Skill in visualizing ideas and concepts clearly and effectively, using sketches, drafts, storyboards, and animatics.

Ability to use specialized software such as Photoshop, ZBrush, Maya, and other digital tools to create 3D images and models.

Knowledge of lighting, setting, and composition techniques to create realistic or fantastical scenes.

Understanding of the basic elements of narrative, characterization and character psychology necessary for creating engaging stories.

Ability to work as part of a team and collaborate efficiently with colleagues, managing project deadlines and communicating clearly and professionally.

Knowledge of marketing and promotional techniques to present and promote one's work as an artist and creative.

Ability to continue to learn and update skills, both independently and through continuing education and participation in industry events.

LIGHTING & RENDERING 2

Academic Year 2024/2025

Type of training activity: RELATED OR SUPPLEMENTARY EDUCATIONAL ACTIVITIES

Disciplinary field:

Disciplinary sector: INF/01 COMPUTER SCIENCE

Number of credits: 6 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): VALERIO DONATI

OBJECTIVES AND CONTENTS OF THE COURSE

In this course, all techniques for professional production of photorealistic renderings will be taught, from the correct import of 3D models to the most advanced texturing and lighting techniques. Study and rendering of the most advanced materials in renderings aimed at cinematic photorealism.(frontal teaching, guided exercises).

PROGRAM

The main objective of the course is to acquire the correct working methodology for creating perfectly photorealistic computer graphics scenes that can be integrated into real scenes, relying for the most part on practical exercises so that the knowledge learned can be applied immediately.

Reference texts

Evaluation procedure:

On-going evaluation, project implementation.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Acquisition of the correct working methodology for the creation of computer graphics scenes.

COMPOSITING 3

Academic Year 2023/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 8 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 120 HOURS

Professor(s): GIOVANNI RICCO

OBJECTIVES AND CONTENTS OF THE COURSE

Objectives:

Understanding of the importance of the compositor's role and duties within the production system and the relationship with relevant departments.

Practice will enable the development and sensitivity to visual composition, attention to detail and "problem solving" skills

Practice and collaboration with the school's various departments will implement the student's training on and off the set.

Methodology:

The student consolidates the various techniques learned the previous years. The school's exercises and courts will place him in front of a "simulation" of real working life.

PROGRAM

Analysis advanced compositing techniques

Advanced removal and chromakey techniques

Advanced 3D

Deep Compositing

Reference texts

Evaluation procedure:

Focused exercises, vfx realization for short films.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Advanced knowledge of Nuke

Advanced professional visual effects realization skills

Problem Solving

Teamwork and cooperation between departments

Use of language and tools

Adherence to deadlines and delivery methods

VISUAL EFFECTS 3 - SHOWREEL

Academic Year 2024/2025

Type of training activity: WORKSHOPS, SEMINARS, ARTISTIC, TECHNICAL AND PERFORMANCE ACTIVITIES

Disciplinary field:

Disciplinary sector:

Number of credits: 12 CFU

Course: VISUAL EFFECT SUPERVISOR & PRODUCER

Year of study: 3°

Semester: ANNUAL

Duration: 100 HOURS

Professor(s): RENATO PEZZELLA

OBJECTIVES AND CONTENTS OF THE COURSE

Design, analysis and resolution of interventions referring to special effects planned for diplomas and extra shorts. On-set supervision of filming, generation and management pipeline for effects realization., interface with other departments until final approval. Using guided exercises.

PROGRAM

Interfacing with other department heads, planning, analysis and on-set supervision of effects. Pipeline management for implementation of requests version management and obtaining final approval. Under the tutelage of the instructor.

Reference texts

The VES Handbook of Visual Effects

The Narrative Power of Visual Effects in Film

Supplementary materials in Pdf format will be provided to support the lectures

Evaluation procedure:

On-going evaluation, project realization.

Grade

At the end of the course, students will have a grade in thirtieths.

Skills acquired

Identification of difficulties already in the design phase of the effect, design, analysis and identification of optimal procedures for implementation. Comprehensive shoot-delivery workflow management.