SPECIALTY

<u>Sound Engineer For Electronic Media And Film Production</u>

Academic & qualification degree: **MASTER**
Professional qualification: **SOUND ENGINEER**
Duration of studies: **2 semesters**
Course of studies: **FULL-TIME**

ANNOTATION

Students with obtained Bachelor's/Master's degree in the specialties of "Electronic technologies in music", "Art of performance (folklore instruments or folklore singing)" and "Art of performance (pop and jazz singing)" in the professional field of 8.3. Musical and Dance Art, or in the specialty of "Pedagogy of Musical Art" in the professional field of 1.3. Pedagogy of teaching …, can be admitted to the Master's degree programme of "Sound engineer for electronic media and film production" in the professional field of 8.3. Musical and Dance Art.

Organisation of Training
The curriculum covers a total number of 495 classes with awarded total of 60 ECTS credits, distributed equally for the two semester in compliance with the state requirements.
The master's degree programme covers compulsory, elective and facultative subjects.
Educational Goals of the Master's Degree Programme
The training course in the master's degree programme of "Sound director of electronic media and film production" **aims** at preparing specialists with educational and qualification parameters to enable them in the pursuit of a complete career in sound-recording studios for CD and DVD production, for sound tracking and sound-processing for electronic media – radio and television, for the production of documentary, cartoon, short and feature film movies, for musical shows, for musical editing and setting, for handling the sound matter at musical performances.

Qualification and Career Development
The successful graduates of the master's degree programme of "Sound engineer for electronic media and film production" are trained to perform specialised occupational activities in the field of sound processing and design.
The graduates in this master's programme shall be able to perform research, research-applying and artistic-creative activities (as per requirements of the Regulation on the state requirements to acquiring higher education of Bachelor's, Master's and Specialist's academic and qualification degrees – article 9 paragraph 2) and to pursue **careers** as experts or consultants, as follows:

- Sound engineer in radio shows;
- Sound engineer in television shows;
- Sound engineer in sound-tracking feature films, documentary, cartoon and short movies;
- Music designer for commercials sound-tracking;
- Sound engineer in sound recording studios, for the production of CD and DVD;
- Sound engineer for sound-tracking in theatre shows, concerts, ensembles, etc.;

- Teacher at higher schools in subjects in the field of sound processing;

Jobs:

Based on the national classification of jobs and occupations in the Republic of Bulgaria (year 2011) the jobs that can be occupied by the Master Sound Engineers are, as follows:
- Group 5005- Audio engineer;
- Group 5006 – Sound designer;
- Group 3009 – Sound-producer, sound-mixer
- Group 3010 – Audio technician
- Group 3014 – Operator, sound equipment
- Group 3035 – Sound-operator
- Group 3038 - First assistant sound engineer
- Group 3039 - Specialist, sound effects

The master graduates in "Sound engineer for electronic media and film production" shall be entitled to:
- Specialising in various forms of post-graduate qualification and continued training;
- Continuing their education in the Doctor's academic and qualification degree.

CURRICULUM STRUCTURE
Master's Degree Programme: „SOUND ENGINEER FOR ELECTRONIC MEDIA AND FILM PRODUCTION"

Semester one	ECTS credits	Semester two	ECTS credits
Sound recording in cinema and television	**6,0**	Sound recording, mixing and mastering various genres of music	**3,0**
Sound equipment and technologies in a broadcasting studio	**6,0**	Postproduction	**2,0**
Sound engineering for radio broadcasting	**5,0**	Sound engineering for television broadcasting	**2,0**
Audio editing	**5,0**	Elective subject 1	**4,0**
Elective subject 1	**4,0**	Elective subject 2	**4,0**
Elective subject 2	**4,0**	Final state examination or defence of a graduation project	**15,0**
TOTAL :	**30,0**	**TOTAL :**	**30,0**
Total number of credits for the 1st and 2nd semester – 60,0 credits			
Elective subjects		**Elective subjects**	
Group one		**Group two**	
Acoustics of music instruments	4,0	Dubbing	4,0
Sound design	4,0	Video cut and after-effects	4,0
Composing interactive music	4,0	Signal processing	4,0
Integration and interaction of software programmes	4,0	Technology of open-air sound recording	4,0
Total number of classes in the subjects	**8,0**	**Total number of classes in the**	**8,0**

chosen by the group	subjects chosen by the group	
Total number of credits from the elective subjects: 16,0 credits		

SUBJECT CONTENTS

COMPULSORY SUBJECTS:

SOUND-RECORDING IN CINEMA AND TELEVISION

ECTS credits: 6,0
Weekly number of classes: 1 l. +3 s.
Form of control of knowledge:
Ongoing assessment: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Hristo Pavlov, Ph.D.
Contact phone: +359 73/ 588 511
e-mail: art@swu.bg

Annotation:
The course in Sound-Recording in Cinema and Television is aimed at gaining knowledge and practical skills in sound-recording in television and cinema formats that vary by their nature. The objective of this subject is to provide students with knowledge for work with basic technologies in cinema and television, the programming means and the optimum interaction between them in the implementation of sound-recording activities. Knowledge is acquired of the structure and contents of professional sound engineering work in artistic studios and on the filming stage in activities involving television productions in various genres.

Subject Contents:
The main theoretical contents are distributed into two major sections – sound solution of a movie and specificity of the sound-recording activity in various television genres. Skills for work with engineering equipment are mastered during the practical seminars in the implementation of sound-recording activities, and the specificity of sound-engineer's work in the various television genres is learnt.

Students apply in practice their theoretical knowledge learnt during the lecture course by developing practice assignments related to the topics studied. The principles of work with the respective PC programmes are learnt, too.

Training Technology and Assessment:
The course in Sound-Recording in Cinema and Television provides students with the opportunity to gain both theoretical knowledge and practical skills on the major principles of work in artistic studios for television and cinema productions in various genres. Skills are developed for the performance of sound-recording activities regardless of the environment in which the creative project is implemented. In the course of this process the engineering and technological capacities of the modern cinema-production are used for the achievement of a realistic sound scene.

Student work over diverse practical assignments – sound-recording in open-air, as well as sound-recording in studio environment. The final grade in the subject is a result from the

ongoing assessment and the grade at the practical examination, consisting of a performance of sound-recording on an assigned video.

SOUND EQUIPMENT AND TECHNOLOGIES IN A BROADCASTING STUDIO

ECTS credits: 6,0
Weekly number of classes: 1 l. +3 s.
Form of control of knowledge:
Examination: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Lecturer Margarit Rusev, Ph.D.
Contact phone: +359 73/ 588 511
email: rusev@bnr.bg

Annotation:

The course in Sound Equipment and Technologies in a Broadcasting Studio is aimed at the formation of theoretical knowledge related to the equipment and technologies for sound operations, with which sound broadcast rooms and studios – stationary and mobile - are equipped. Competences for work with the equipment and technologies for sound realisation in broadcasting are developed.

Subject Contents:

During the lecture course students study the theoretical background of sound equipment and the technological process of sound in broadcasting, the main directions to independent studies are established. During the practice seminars trainees master the technical means and the technologies of work in a broadcast studio and out-of-studio environment.

Training Technology and Assessment:

After completing the course in Sound Equipment and Technologies in a Broadcasting Studio, students shall have theoretical knowledge of the equipment and technologies for the realisation of a broadcasting sound, major practice competences for work with the engineering equipment and sound technologies in a broadcast studio. Students gain knowledge of the necessary engineering components of a broadcasting audio studio; of the systems for sound provision of broadcasting (analogue and digital) and computer-based broadcasting systems; of the necessary components of the broadcasting workstation. Trainees develop competences in technique and technologies for the realisation of sound in broadcasting.

The following teaching aids are used: a video presentation system; a broadcast sound studio; a computer-based sound workstation for broadcasting.

In the middle and at the end of the semester two tests have to be passed, and the practice assignments are uniformly distributed in the course of studies. The examination consists of two parts. The first one is theoretical and covers the development of a question from an examination synopsis. The second part is practical: a performance of an assignment using sound-engineering broadcasting means.

SOUND ENGINEERING FOR RADIO BROADCASTING

ECTS credits: 5,0
Weekly number of classes: 1 l. +2 s.
Form of control of knowledge:

Ongoing assessment: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Lecturer Margarit Rusev, Ph.D.
Contact phone: +359 73/ 588 511
email: rusev@bnr.bg

Annotation:
      The course in Sound Engineering for Radio Broadcasting Studio is aimed at the formation of knowledge, skills and competences required for the sound engineer's work in the programme implementation at a broadcasting radio station.
Subject Contents:
      During the lecture course students study the theoretical backgrounds of sound engineering in radio broadcasting and the technological process for the implementation of a sound programme in radio broadcasting.
      During the practical seminars students master and apply in practice the theoretical knowledge, gain practical skills and competences in the technological process for the implementation of a sound programme in radio broadcasting.
Training Technology and Assessment:
      Students acquire theoretical knowledge of the technological process of broadcasting radio production, of the terminology and formats of radio broadcasts, of the structure of a broadcasting programme and of the production technology. Trainees are acquainted with the nature of the job of a sound engineer in radio broadcasting and of the practice implementation of a radio broadcasting.
      Students acquire competences for work with microphones in a radio studio and the commutation of sound signal for broadcasting over the air; acquire skills for work with computer-based sound workstations for radio broadcasting. Students develop further skills for making radio signals and radio commercials.
      The following teaching aids are used: a video presentation system; a broadcast radio studio; a computer-based sound operating station for radio broadcasting.
      In the middle and at the end of the semester two tests have to be passed, and the practice assignments are uniformly distributed in the course of studies. The assessment (ongoing control) is based on the performance of the assignments given in the course of studies.

AUDIO EDITING

ECTS credits: 5,0
Weekly number of classes: 1 l. +2 s.
Form of control of knowledge:
Ongoing assessment: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assistant Prof. Valeri Dimchev, Ph.D.
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Annotation:

The course in Audio Editing aims at improving the theoretical competence and practice skills of students in their work with DAW – digital audio workstation (Pro tools, Cubase and others). The main place in this process is taken by audio recording and the strategic software approaches, principles and functions in audio record processing and manipulation.

Subject Contents:

The lecture course is structured into three parts. Students learn the main theoretical knowledge regarding the issues studied, the innovative methods of audio recording and processing. Trainees study both the traditional setting of principle and some innovative or unconventional approaches. Practical seminars add further to the theoretical knowledge acquired throughout the lecture course and develop practice assignments; the studied operations, strategies and principles are applied in practice.

Training technology and assessment:

Theoretical knowledge in configuring a PC for operations with an audio workstation (DAW) is acquired, skills required for the complete processing of audios in a digital environment are mastered, as well as the existing software functions. Trainees acquire practical skills for recording a sound source and audio processing to the final high quality production of an audio product (a song, an instrumental music, a sound for a film, TV, theatre, etc.).

Students independently work on their technological models following a preliminary assignment. This way they acquire skills for applying correct settings at the level, and high-quality authentic timbre characteristics. Trainees are trained to work using advanced principles and approaches to mixing and mastering, such as automation, work by groups, etc.

In the middle and at the end of the semester two tests have to be passed, and the practice assignments are uniformly distributed in the course of studies. The assessment at the end of the semester requires the successful performance of the activities specified in the syllabus.

SOUND RECORDING, MIXING AND MASTERING VARIOUS GENRES OF MUSIC

ECTS credits: 3,0
Weekly number of classes: 1 l. +2 s.
Form of control of knowledge:
Examination: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Kremena Angelova, Ph.D.
Contact phone: +359 73/ 588 511
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Annotation:

The course in Sound Recording, Mixing and Mastering Various Genres of Music is based on the already well mastered knowledge in the field of audio engineering, sound recording and sound design. All the stages are studied since the occurrence of sound, its spreading in an acoustic environment and its recording, up to processing, mixing and

mastering the end product, influence of noise effects and its overcoming. The subject contributes to forming theoretical knowledge and practice skills for the process of recording based on the conditions of implementation, as well as the performance of mixing and mastering.

Subject Contents:

The theoretical backgrounds for implementation of sound recording are learn during the lecture course, as well as its peculiarities depending on the conditions of implementation, During the practical seminars practice skills for recording, mixing and mastering are developed, as well as for noise reduction considering the acoustic specificities and the type of performed activity. Students work on practical assignments related to the studied topics; they learn the principles of work with the respective PC programmes and thus perform their assignments.

Training Technology and Assessment:

Students acquire knowledge of frequency ranges and various styles of music; of the influence of acoustic peculiarities of the room and the significance of microphone situating. Knowledge is acquired for performing sound recording and of its specificities depending on the acoustic peculiarities of the environment, the impact of various noises and the ways to overcome them. Knowledge is learnt of the process of mixing and selecting effects, with a view to the specific artistic parameters pursued. Students gain knowledge and practice skills for the process of mastering.

Throughout the course of the semester students prepare at least five practical assignments. The examination is also a practice one and covers sound record processing.

POSTPRODUCTION

ECTS credits: 2,0
Weekly number of classes: 2 s.
Form of control of knowledge:
Ongoing assessment: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Kremena Angelova, Ph.D.
Contact phone: +359 73/ 588 511
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Annotation:

The course in Postproduction is aimed at forming knowledge, skills and competences required for the implementation of the entire postproduction of videos. Theoretical knowledge is learnt of the main postproduction stages, of the basic laws in sound editing and of the problems occurring in practice.

Subject Contents:

In the course of the practical seminars students master their practice skills for handling the postproduction process related to sound and video synchronisation and further audio operations depending on the specificities of video material. The main stages of postproduction of videos are learnt and practice skills are developed for handling the sound postproduction process in the preparation of audio material and its synchronisation to the respective video frames.

Training Technology and Assessment:

Students acquire theoretical knowledge of the different stages in the implementation of the postproduction to movie production, as well as practice skills in synchronizing sound to video frames. Students gain competences for sound handling of videos. The main positions of principle are learnt related to adding sound to videos and the processes of sound adjustments, as well as practical skills for voice-offs adding, identifying the main problems occurring in that process and the ways to overcome them.

The teaching aids used are, as follows: video presentation system; practice activities software.

In the course of the semester the students pass a test and develop a practice assignment. The assessment is based on the performance of the activities during the semester.

SOUND ENGINEERING FOR TELEVISION BROADCASTING

ECTS credits: 2,0
Weekly number of classes: 2 s.
Form of control of knowledge:
Ongoing assessment: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Lecturer Emil Traychev, Ph.D.
Assoc. Prof. Kremena Angelova, Ph.D.
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Annotation:
The course in Sound Engineering for Television Broadcasting is aimed at the formation of knowledge, skills and competences required for the work of the sound engineer in various television shows.
Subject Contents:
The subject aims at the formation of knowledge and skills of the technology of the programme implementation of a sound television programme. During the practical seminars trainees acquire competences for handling a sound product in various television formats. Theoretical knowledge is learnt of the technology of a television production and the role of sound engineer in such a production.
Training Technology and Assessment:
Students acquire theoretical knowledge of the terminology of TV and of the technological process of broadcast TV production, of the structure of the broadcast, of the nature of the sound engineer's job. They master skills for work with the microphones in an audio studio and switching the sound signal broadcasting over the air; they acquire skills to work with computer-based sound workstations for audio broadcast. Students acquire competences for practice implementation of a TV show broadcast and skills to make audio signals and TV commercials.

The teaching aids used are, as follows: video presentation system; broadcast audio studio; computer-based sound workstation for TV audio broadcast.

Students are tested in the middle and at the end of the semester. The assessment (ongoing grade) is based on the performance of the assignments throughout the semester.

ACOUSTICS OF MUSIC INSTRUMENTS

ECTS credits: 4,0
Weekly number of classes: 1 l. + 2 s.
Form of control of knowledge:
Examination: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assistant Prof. Valeri Pastarmadzhiev, Ph.D.
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Annotation:

The course in Acoustics of Music Instruments is aimed at studying the acoustic process within the music instruments and the physical processes and phenomena pre-determining them. Major theoretical knowledge is provided of sound-formation, occurrence and development of tone systems. The subject deals also with sound shaping and sound emitting. Students acquire knowledge with regard to sound wave spreading, electroacoustics and spatial acoustics. The knowledge acquired as a result from the course in Acoustics of Music Instruments is largely applied in a series of musical subjects like harmony, instrument studies, orchestration, conducting, etc.

Subject Contents:

This subject aims at providing knowledge directed to the formation of understanding of the main mechanisms of hearing perception of sound signals and structure of the hearing system. The knowledge and skills acquired this way can be applied in practice in sound engineering of music instruments. During the practical seminars students gain knowledge of the acoustics, pattern, sound formation and sound emission of the various groups of music instruments both of natural origin and via computer simulations.

Training Technology and Assessment:

Students are provided with knowledge of the main physical principles, sound pressure, velocity of particles, volume of sound, velocity of sound, length of wave; sound vibrations in mechanical systems; sound vibrations as a function of time; knowledge of the various types of music pitch. Knowledge is offered aimed at the formation of understanding of the main mechanisms of hearing perception of sound signals; of spreading of sound waves and of the structure of the hearing system. Student acquire knowledge of the properties of sound, pattern and sound formation of music instruments and their acoustic peculiarities; sound spreading over the air and closed spaces, reverberation. Musical compositions are listened to and the nature of the hearing perception of musical signals is determined.

In the middle and at the end of the semester students have to pass two tests, and the practice assignments are uniformly distributed throughout the course of studies. A course paper is to be prepared, too. The examination is carried out in the form of a test covering 20 questions.

SOUND DESIGN

ECTS credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Ongoing assessment: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Hristo Pavlov, Ph.D.
Contact phone: +359 73/ 588 511
e-mail: art@swu.bg

Annotation:

The course in Sound Design is aimed at the formation of knowledge, skills and competences required for the implementation of the sound postproduction – the overall sound design. Knowledge is provided of the different stages in the implementation of sound design and skills are developed for the final sound processing, mastering techniques and methods of work and technical support in the implementation of the sound postproduction.

Subject Contents:

During the practice seminars students learn the theoretical backgrounds of the key stages of sound design. Theoretical knowledge is formed of the essence and peculiarities of sound design.

This subject aims at learning the main stages, principles of work and specificity at sound processing and at mastering the technologies in a main process in postproduction that comes second by significance after editing and superposition of sound files, and namely their processing and final finish.

Training Technology and Assessment:

Students acquire theoretical knowledge of the technology of handling the final process of sound design, as well as practical skills for sound processing and finalisation of creative projects. Trainees are provided with knowledge and practice skills for "Surround" mixing; for the types of sound effects and for the peculiarities in their application. Students learn theoretical knowledge and develop practical skills in creating sound effects in commercials and movies. They also gain practice skills in audio processing and sound finalisation of various online objects and short videos.

The following teaching aids are used: video presentation system, software for practice seminars.

Students have to pass a test and to submit a minimum of three practical assignments in the course of the semester. Their assessment is based on the performance of activities throughout the semester.

COMPOSING INTERACTIVE MUSIC

ECTS credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Ongoing assessment: I
Methodological guidance
Chair of „Music"
Faculty of Arts

Lecturers:
Assistant Prof. Valeri Pastarmadzhiev, Ph.D.
Contact phone**:** +359 887128962
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Annotation:

The course in Composing Interactive Music is aimed at forming practice skills related to the principles and engineering means for the creation of interactive music applicable to PC/video games, software applications, film and media music. Students acquire practice skills and habits for work with different technologies and software applications for composing, arranging, orchestrating and processing music, which is in interaction with a video image (picture). The subject aims at acquainting students with the specificity of the PC application in that area of music.

Subject Contents:

Students acquire skills and habits for work with various technologies and software applications for composing, arranging, orchestrating and processing music. Specific techniques are applied in creating a computer simulation. Knowledge for work with musical software and virtual synthesisers is used for creating music applicable to an interactive environment. A special attention is paid to overcoming the technical, compositional and orchestration problems at computer simulation. Practice skills are formed for the expression of a particular thematic character of a situation in a video image by composing interactive music.

Training Technology and Assessment:

Students master skills for proper use of software sequencers; work with the virtual tools of Pro Tools software and others. Trainees plan the various stages of composition, arrangement and orchestration based on the specificities and requirements of the interactive environment. An overall conception is developed for implementing basic compositional solutions by the means of studies of various musical techniques and methods of sound presentation depending on the style and genre peculiarities.

Teaching aids used in the course of training: production sound-recording studio; computer workstation with installed software sequencer and hardware sound-recording systems; MIDI keyboard/controller; sound interface; sound-reproducing equipment, etc.

Students develop two small projects (creating music /a fragment/ for a video game, music for commercials, etc.) and a big project (creating music for a short film). The final grade for the semester is formed as an average result from the said activities performed throughout the semester.

INTEGRATION AND INTERACTION OF SOFTWARE PROGRAMMES
ECTS credits: 4,0
Weekly number of classes: 2 l. + 1 s.
Form of control of knowledge:
Examination: I
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assistant Prof. Valeri Dimchev, Ph.D.
Contact phone: +359 89825306
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Annotation:

The objective of the subject of Integration and Interaction of Software Programmes is to develop the required knowledge and skills in order to facilitate a free exchange of complete musical projects, files, ideas between the different audio/video software programmes and applications. The subject provides the required training to enable students synchronise various programmes when working on a particular project. Students are also trained how to work with composers, studios, musicians at which an exchange, archiving and transfer of work projects and files is necessary.

Subject Contents:

The lecture course is structured in four parts. During it the main methods and approaches to exchange of files between different computer programmes are analysed and studied, as well as modern principles and rules making it possible to work using two or more different software applications. Students become acquainted with illustrative videos and already developed work projects, in which the technological approaches studied have been used.

During the practice seminars students develop practical skills in performing the assignments; they get acquainted with the ways and approaches at solving a particular task or requirement.

Training Technology and Assessment:

Students are acquainted with the modern principles, standards, practices, where an exchange of files and projects is required; a selection of appropriate audio/video MIDI, LOOP formats is made. Knowledge and skills are gained for generating AUDIO tracks and samples using a MIDI application. Students get acquainted with the REWIRE protocol; they create their own and open external OMF projects, archive projects and transfer information to various carriers through the internet or physical data carrier. Trainees work with external applications, virtual tools and become acquainted with the various standards – VST, VSTI, AAX, AU.

Students have to pass two tests and prepare at least two practical assignments in the course of the semester. The examination is written and covers the development of two questions from an examination synopsis.

GROUP TWO
DUBBING

ECTS Credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Examination: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Klavdiya Kamburova, Ph.D.
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Annotation:

The course of studies in Dubbing provides knowledge with regard to the preparation, implementation and the team work of the actor and sound engineer. The professional work behind a microphone may be performed during radio broadcasts or implemented at studios for dubbing and post-dubbing, synchronisation of commercials, audio books, etc. The theoretical

and practical knowledge gained by students in the master's degree programme shall contribute to their successful career in the area of radio and television formats.

Subject Contents:

During the practice seminars students master skills for preparation and implementation of various types of dubbing. Students are provided with theoretical knowledge of the specificity of the activity; screenplays are discussed, filming programmes are prepared, tasks are distributed, technical equipment and organisation of rehearsals are discussed.

Training Technology and Assessment:

This subjects teaches students to skills for reading and artistic vocal interpretation of an unknown text; for handling sound and speech characteristics of film and TV characters; for development of own specific techniques; for continuous studying and improvising. Trainees acquire knowledge and practice skills for performing dubbing of e-books, cartoons and games, radio and TV dubbing.

Students prepare audio dubbing of a film fragment. During the semester students prepare at least five practical assignments. The examination is practical. It consists of a written analysis of the tasks performed during the semester.

VIDEO-CUT AND AFTER-EFFECTS

ECTS credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Examination: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assoc. Prof. Klavdiya Kamburova, Ph.D.
Contact phone: +359 73/ 588 511
e-mail: kamburova@swu.bg

Annotation:

The course of studies in Video-cut and After-effects aims at providing students in the master's degree programme with theoretical knowledge and at forming practice skills for cutting, after-effects, of the main settings and parameters for work with them. The subject forms skills for independent studies of new programmes or versions of the programmes used so far.

Subject Contents:

During the practical seminars students master skills for work with a particular software and the algorithm of actions under the different functions. The subject aims at introducing students to the programme interface, in order to ensure proper and rational use of the application. Students learn how to analyse the peculiarities of the film image; to learn and use the software interface. The subject gives theoretical knowledge and establishes practical skills for work with software necessary for video-cutting and achieving after-effects; skills are formed related to the algorithm of actions at the implementation of the video-cut and creation of various effects.

Training Technology and Assessment:

Students create a composition on timeline and use keyframes, acquire skills to change the conversion values: coordinates of supporting point, position, rotation and transparency, as well as to work with multi-layer contents. Trainees distinguish between the three types of

ratios of keyframes: linear, Bezier and retention, create and import masks, layer masks, background from Photoshop and Illustrator. Students learn how to combine a live scene with static shoots, use various regimes of fusion of colour corrections, change of density, change of sharpness in live video images and shoots, to change the speed of motion – uniform-accelerated and uniform-decelerated.

Students prepare audio dubbing of a film fragment, as well as other practical assignments. The examination consists of a written analysis of the tasks performed throughout the semester.

SIGNAL PROCESSING

ECTS credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Examination: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Assistant Prof. Valeri Dimchev, Ph.D.
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Annotation:
The course of Signal Processing is aimed at the formation of knowledge and skills required for independent work with different sound effects and samples, as well as their classification and arrangement based on different indicators. This subject aims at extending and furthering students' competencies with some widely used modern methods and approaches for work with studio sound, with various areas of application – audio, television, cinema, etc.
Subject Contents:
During practice seminars students acquired major theoretical knowledge regarding sound signal processing and areas of their application in modern music. Students pursuing Master's degree gain skills for creating sound libraries containing effects (FX), loops (LOOP), virtual instruments. The sound libraries once created may be largely used in television and film setting, internet applications, composing acoustic or electronic music, and others.
Training Technology and Assessment:
Trainees acquire knowledge and skills in the used formats of sound-recording in modern technologies with the corresponding resolutions – sampling frequency and bit, field recording of sound effects (FX), work with the loop technology, creation of virtual instruments, etc. Students record sound sources indoors and outdoors, they are able to edit recorded files and to arrange them based on a specific indicator, create completed sound libraries and sampled virtual instruments. Students are provided with theoretical knowledge on the types of audio formats and application areas, as well as with the practical skills required for work with musical software at sound recording, converting audio from/into various audio formats, preparing musical loops, creating sampled virtual instruments.
The examination is written; it covers the development of two questions from an examination synopsis.

TECHNOLOGY OF OPEN-AIR SOUND RECORDING

ECTS credits: 4,0
Weekly number of classes: 3 s.
Form of control of knowledge:
Examination: II
Methodological guidance
Chair of „Music"
Faculty of Arts
Lecturers:
Lecturer Emil Traychev, Ph.D.
Contact phone: +359 73/ 588 511
e-mail: art@swu.bg

Annotation:

The course in Technology of Open-Air Sound Recording is developed onto already acquired knowledge in the field of audio engineering, sound recording and sound design. All the stages are followed, from the occurrence of sound, its spreading into acoustic environment, its recording, up to final product processing, mixing and mastering. The influence of noise effects and their overcoming is studied.

Subject Contents:

This subjects aims at formation of skills for independent development of a sound-recording projects, processing and media publishing of a course project. During the practice seminars students master skills in recording, mixing, mastering, noise cleaning, considering the specificity of the open-air terrain and the type of implemented activity. Students learn the basic theoretical knowledge regarding sound signal processing and the areas of their application in modern music.

Training Technology and Assessment:

Students acquire knowledge on the implementation of recording and its specificities depending on the acoustic peculiarities of environment, the impacts of various noises and the ways to overcome them. Trainees acquire knowledge of the process of mixing and selecting effects, with a view to the specific artistic parameters pursued; on the process of mastering. Theoretical knowledge and practical skills are formed for the process of recording considering the conditions of implementation; practice skills are developed for the implementation of mixing and mastering.

Students have to pass two tests and to develop at least two practice assignments in the course of the semester. There is a practical examination consisting of processing a sound record recorded outdoors.