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Light & Sound




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Project

„Professional training for stage and film lighting and sound technicians”

2020-1-PL01-KA202-081664

Scheme of the training for vocational instructors, vocational teachers, who train in the field of light and sound in the music and film industry



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The lighting designer is one of the most important people on a film set. On his skills depends not only the quality of the shots, but the atmosphere of the entire scene. To achieve this, he has a wide range of continuous lighting lamps at his disposal. So which lamp should he choose? Break out of the dark side of power and read our guide to film lighting.

Lighting technology in film has been evolving since the early days of cinema history. In the beginning, only sunlight and various modifiers were used. The first source of artificial light was mercury lamps, quickly replaced by arc lamps. After the introduction of a new type of tape, recording all wavelengths of light, film studios began to use incandescent light. Tungsten bulbs were quickly replaced by halogen bulbs, which, due to their small size, allowed to reduce the size of the lamps.

The second important profession we describe here is that of a sound engineer, or sound specialist. It is very important to properly publicize a concert, record sound during a film set or "process" recorded sound, i.e. mastering.

We want to train people who want to develop in one of the mentioned directions.



General level	<p style="text-align: center;">Module I: Introductory module Main purpose: Preparation for training</p>					
Learning situation 1: Motivation in the learning process						
Content	Objective	Activity	Method	Material	Time	
<p>Good beginning:</p> <ol style="list-style-type: none"> 1) Introduction of trainers & trainees 2) Introduction and presentation of the programme. 3) Mutual arrangements, between the trainers & trainees, about their expectations of the aims. 4) Clarification of contract in the context of the theme of training. 	<ol style="list-style-type: none"> 1) Ice-breakers and introductions: trainers and participants get to know each other. Building a good atmosphere. 2) Stimulating the involvement of participants in learning new content and active participation in the training. 3) Making the participants feel an increased sense of control and power over their lives. 4) Increasing comfort and safety of the participants. 5) Introducing the training programme to the participants and agreeing on the objectives of the training. 	<ol style="list-style-type: none"> 1) Activation and integration exercise 2) A trainer explains the contents and the objectives of the programme. A trainer asks questions about the needs of participants. Trainees express their expectations and opinions on the content of the programme 3) Exercise "Clarification of contract" 	<ul style="list-style-type: none"> - individual work - work in group - presentation - explanation - discussion 	<ol style="list-style-type: none"> 1) flipchart, post-it notes, sheets of a white papers A4, felt-tip pens; 2) printed description of: <ul style="list-style-type: none"> - programme for each trainee - training contract concluded at the beginning of the project 	45 min.	



	<ol style="list-style-type: none"> 1) Motivation - basic information 2) Motivation process and motivating factors in the learning process 3) Methods of shaping behavior 4) Self-motivation and increasing self-confidence 5) Principles of group motivation 6) Motivating factors for learning according to. 7) M. Knowles: <ul style="list-style-type: none"> - success - will - value - pleasure 8) Main principles of vocational training 9) The process of professional learning: <ul style="list-style-type: none"> - experience <ul style="list-style-type: none"> - reflection - conclusion - verification 10) Adaptation of ways of motivation to individual needs of course participants 11) Developing interest in modern technologies use in film and music production 	<ol style="list-style-type: none"> 1) Participants will gain knowledge of the motivation process. 2) They will be able to 3) - identify motivating factors for vocational training 4) - apply methods of forming , 5) - manage motivation in the group process 6) Expand their knowledge on: 7) - the main principles of vocational training, 8) - learning process, 9) - adapt methods of motivation to individual needs of training participants 	<ol style="list-style-type: none"> 1) The vocational teacher, vocational instructor explains the theoretical part of the course, using case studies, practical exercises, referring to the experience of participants. 	<ul style="list-style-type: none"> - short theoretical explanation with PowerPoint - discussion - work in small groups - brainstorming in big group - case studies - presentation the effects of group work 	<ul style="list-style-type: none"> - PowerPoint presentation, - laptop and projector for a trainer, - flipchart, felt-tip pens - written instructions to a case studies - written instructions to the teamwork with list of questions to reflection 	<p>1 day 3x45</p>
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General level	<p align="center">Module II: Health and safety rules on film set, music stage Main purpose : Safety during practice and future work</p>					
Operational level	Learning situation 1: Implementation of security aspects.					
	Content	Objective	Activity	Method	Material	Time
	<p>Good beginning:</p> <ol style="list-style-type: none"> 1) Introduction of trainers & trainees 2) Introduction and presentation of the programme. 3) Mutual arrangements, between the trainers & trainees, about their expectations of the aims. 4) Clarification of contract in the context of the theme of training. 5) Measuring the motivations and the level of the IT knowledge of participants 	<ol style="list-style-type: none"> 1) Ice-breakers and introductions: trainers and participants get to know each other. Building a good atmosphere. 2) Stimulating the involvement of participants in learning new content and active participation in the training. 3) Making the participants feel an increased sense of control and power over their lives. 4) Increasing comfort and feeling of safety of the participants. 5) Introducing the training programme to the participants and agreeing on the objectives of the training. 	<ol style="list-style-type: none"> 1) Activation and integration exercise 2) A trainer explains the contents and the objectives of the programme. 3) Trainer asks questions about the needs of participants. 4) Trainer prepares with the group a scale about the different computer skills and every participant can decide which is the appropriate level for him/her 5) Trainees express their expectations and opinions on the content of the programme 6) Exercise "Clarification of contract" 7) Trainer adjusts the pace of teaching to the participants' work pace 	<ul style="list-style-type: none"> - individual work, - work in group, - presentation, - explanation, - discussion, 	<ol style="list-style-type: none"> 1) flipchart, post-it notes, sheets of a white papers A4, felt-tip pens; 2) printed description of: <ul style="list-style-type: none"> - programme for each trainee - training contract concluded at the beginning of the project 	<p>1 day: 1 x 30 min.</p>



	<ol style="list-style-type: none"> 1) Security protection 2) The role of the H&S coordinator on set and stage 3) A detailed security plan for all shooting work, 4) Supervision of compliance and execution of the plan, 5) Coordination for difficult shooting, 6) Health and safety coordination for scene security, 7) Health and safety for the construction of stage structures, 8) Light and sound connections, 9) Health and safety of electrical issues 	<ol style="list-style-type: none"> 1) Participants will gain knowledge of safety when performing work on a film set and music stage, 2) Participants will gain practical skills 3) Increase participants' comfort and sense of security. 	<ol style="list-style-type: none"> 1) A health and safety specialist explains the theoretical issues 2) Demonstrates to the entire group how to use occupational safety tips 3) The pace of teaching needs to be adjusted to the participants' work pace and give them chances to back up if they don't understand the topic 4) presentation of instructional videos 	<ul style="list-style-type: none"> - work with - PC or laptop - Practical exercises in developing film set security cards, stunt shooting security cards, sound effects, special effects such as explosions, shots or fights, use of knife and other dangerous objects, - Practical exercises in developing security cards for stage structures 	<ul style="list-style-type: none"> - laptop or individual computer station for each participant - laptop and projector for the H&S specialist - printed training materials or OSH manuals - flipchart, markers 	<p>2 days - every day: 5 x 45 min.</p>
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General level	<p align="center">Module III: Equipment, Computer Programs AND Materials Used in Film and Music Production for Light and Sound Main purpose : operation of lighting and sound equipment, computer programs</p>					
Operational level	<p>Learning situation 2: Participants have no knowledge of operating equipment, software and information technology</p>					
	Content	Objective	Activity	Method	Material	Time
	<ol style="list-style-type: none"> 1) Basic issues on the types of lamps for lighting a film set and scene 2) Principles of working with lights 3) Types of light: discharge, incandescent, led, 4) Wiring, cables and their types, 5) Rechargeable batteries, v-lock and other devices that support the operation of lamps, 6) Types of sound systems: sound screens, audios, 7) Microphones, types and their use, 8) Public address mixers, types and specifics 9) Tools and materials in film and music production 	<ol style="list-style-type: none"> 1) Participants will gain knowledge of how to operate equipment and materials used in film and music production 2) Participants will gain practical skills in the use of computer programs for sound reinforcement, remastering, handling lights 3) Increase participants' comfort and sense of security. 	<ol style="list-style-type: none"> 1) The vocational teacher, learning instructor briefly explains the theoretical part of the training. 2) The vocational teacher, learning instructor presents to the whole group and then to each participant individually, step by step, all the elements of the exercises 3) The vocational teacher, learning instructor adjusts the pace of teaching to the pace of the participants and gives them time to repeat the activities. 	<ul style="list-style-type: none"> - work with - PC or laptop computer - Practical exercises in operating computer programs for controlling stage lights, sound system, - practical exercises in the operation of equipment and use of materials in film and music production in the field of light and sound, - practical exercises in printing Word documents 	<ul style="list-style-type: none"> - laptop or individual computer station for each participant - laptop and projector for trainer - printer - printed training materials or IT/ICT manuals, - computer programs - licenses, - film lamps, lamps for stage illumination 	<p>5 days</p> <ul style="list-style-type: none"> - every day: 4 x 45 min. - coffee break after every 1,5 h or after every 45 min. (it depends of the group needs)



General level	MODULE IV: Light in film and on stage Main purpose: Preparing to work on a film set as a lighting technician					
Operational level	Learning situation 3: Working on a film set and stage					
	Content 1) principles of cooperation with the cinematographer, graffiti artist, production designer, director and producer, 2) practical technical classes in the lighting warehouse and on the film set, 3) stage techniques and show lighting, 4) issues related to the protection of copyright and intellectual property in the Polish legal system, as well as the basics of English terminology necessary for work on a film set (the course will include classes in the basics of English terminology) 5) fundamentals of electricity and optics, 6) artificial light sources and their characteristics, 7) lighting fixture, its construction and essential components and safe operation of lighting fixtures,	Objective 1) Participants will gain knowledge of how to work on a film set in terms of light 2) Participants will learn how to connect lights, how to set up tripods. 3) Participants will learn what is a flag, frame, blender, butterfly, 4) Participants will learn how to set up film lights for a specific visual effect 5) Increase participants' comfort and sense of security.	Activity 1) The vocational teacher or trainer briefly explains the theoretical part of the training. 2) Demonstrates the various elements of the work, the stages of work and prepares for the exercises. 3) Demonstrates to the entire group and then to each participant individually, step by step, how to perform each exercise. 4) Adjusts the pace of teaching to the pace of the participants and gives them time to repeat the activities.	Method 1) working with a PC or laptop computer 2) practical exercises on the set or in the practice room of the various stages of work: unloading the light, mounting the light, setting the light, connections, final setting, 3) practical exercises in setting up the light for the desired effect, distinguishing	Material - laptop or individual computer workstation connected to the Internet for each participant - laptop and projector for - trainer - movie camera, - film light: discharge, incandescent, mats, kinoflo	Time 6 days - every day: 6 x 45 min.



	<p>8) measurement of light in practice and ways to adjust light intensity, 9) color of light, ways and methods of obtaining a certain color and ways to modify the light output, 10) working with colors and creative use of the possibilities of lighting equipment, 11) cooperation with the cinematographer / cinematographer in the selection and preparation of lighting equipment for the period of shooting and study of the film script and other documentary materials, 12) working with lighting equipment from its installation and connection to electricity, through operation 13) during shooting and controlling the correctness of its work to the dismantling of the equipment, 14) additional periodic training in occupational safety and health, culminating in an examination and obtaining a certificate allowing participation in the shooting sets for 3 years.</p>			<p>the types of light: drawing, filling, control light 4) practical exercises in setting blends, frames, flags.</p>		
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General level	Module V: Sound in film and music production Purpose: To learn the principles of film and music production in terms of light and sound					
Operational level	Learning situation 4: Working with light and sound, recognizing types of devices					
	Content	Objective	Activity	Method	Material	Time
	1) Ways of sound realization (100% with the possibility of postsynchrones, realization of pilot shots, recording of effects, atmospheres, backgrounds, film recordings, reporters, stage, radio plays). 2) Knowledge of equipment and techniques for the realization of recordings. 3) To discuss the factors affecting the way of sound realization and the work of "microphone makers". 4) Development of soft skills - cooperation in a film crew, judgment and decision-making skills, development of creativity. 5) Classes in industry English.	1) the principles of work in a film crew and the characteristics of the various functions such as cinematographer, assistant cinematographer, technician, "microphone maker", music consultant and the scope of their work, i.e. camera work, image format, lighting and filming method, etc.; 2) Dramaturgy of the scene, working with the actor, cooperation with other verticals, i.e. set designer, costume designer, make-up artist; 3) Working with the script - recognizing important sound elements in the script, pre-recording arrangements with the director, working with the actor, ways to implement the rehearsal before shooting; 4) assessment of the conditions for recording scenes, cooperation with the sound operator; 5) multi-channel sound technology on set, ways of wired and wireless	1) The vocational teacher, trainer briefly explains the theoretical part of the training. 2) The vocational teacher, vocational instructor introduces to the whole group and then to each participant individually, step by step, the issues of sound, connections, microphone settings, listening connections. 3) The vocational teacher, vocational instructor conducts a class on the use of computer programs with which to control the sound system of the stage.	1) working with a PC or laptop 2) practical exercises in using an e-mail box 3) practical exercises in printing e-mail messages	- laptop or individual computer workstation connected with Internet for each participant - laptop and projector for a trainer - Software licenses for learning how to use the music stage sound system software, - classes conducted in theaters,	4 days - every day: 6 x 45 min.



		<p>microphonics, mono, stereo, multi-channel and VR;</p> <p>6) Types of microphones and microports used, techniques for using microphones in the context of the project being performed, basics of working with radio equipment (analog and digital) and microports, microphone equipment and types of cables and small accessories;</p> <p>7) factors affecting the way sound is produced, which include: cameras, cassettes, lenses, stationary cameras in motion, scene dynamics, lighting, outdoor shooting, atmospheric factors, working with children or animals;</p> <p>8) microphone maker's work techniques, i.e. ways of holding the pole, proper movement, selection of the place of realization of the recording;</p> <p>9) use of modern microphonics and sound realization techniques, omnidirectional and three-dimensional sound production capabilities including VR;</p> <p>10) grading of sound plans, dialogues, synchronous effects, side effects, interiors with different acoustics, working with one actor, working with multiple actors, working with two</p>	<p>4) The vocational teacher, vocational instructor adjusts the pace of teaching to the participants' pace and gives them time to repeat the activities.</p>		<p>concert halls, music clubs.</p>	
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		<p>microphones, variation of plans in a shot, stopping microports, car shooting, shooting without the possibility of using microports and shooting with music;</p> <p>11) working with the organizational and production division, recording proper, participation in editing with special attention to the specifics editing of individual sound elements;</p> <p>12) use in the editing of one hundred percent recordings, off sounds, effects, atmospheres, stage reports with music, playback photography. Practice will include the realization and editing of audio recordings, learning the specifics of the recording studio.</p>				
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