COURSE DESCRIPTION

COURSE/SUBJECT: PHOTOGRAPHY AND LIGHTING
YEAR 3 | SEMESTRAL COURSE
SEMESTER: 2ND
DEGREE: AUDIOVISUAL COMMUNICATION
MODALITY: ON-CAMPUS
ACADEMIC YEAR 2017/2018
FACULTY OF HUMANITIES AND COMMUNICATION SCIENCES
1. COURSE/SUBJECT IDENTIFICATION

1.- COURSE/SUBJECT:

Name: Photography and Lighting
Code: b304; l305; n306; p404; t310
Year (s) course is taught: 3rd
Semester (s) when the course is taught: 2nd
Type: Compulsory Subject
ECTS of the course: 6
Hours ECTS: 30
Language: English
Modality: On-campus
Degree (s) in which the course is taught: Audiovisual Communication
School which the course is taught: Humanities and Communication Sciences

2.- ORGANIZATION OF THE COURSE:

Department: Audiovisual Communication and Advertising
Area of knowledge: Audiovisual Communication and Advertising

2. LECTURERS OF THE COURSE/SUBJECT

1.-LECTURERS:

Responsible of the Course
Name: Dr. Gonzalo Fuentes Cortina
Phone (ext): Tfno. 914539529 Ext. 4529
Email: gonzalo.fuentescortina@ceu.es
Office: 5
Teaching and Research profile: Lecturer
Research Lines: Film and TV

Lecturer(s)
Name: Dª. Berta García Castiella
Phone (ext): Tfno. 914539500 Ext. 4547
Email: berta.garciacastiella@ceu.es
Office: 12

Lecturer(s)
Name: D. José Luis de la Calle Muñoz
Phone (ext): Tfno. 914564200 Ext. 4532
Email: jcalle.fhm@ceu.es
Office: 1
2.- TUTORIALS:

For any queries students can contact lecturers by e-mail, phone or visiting their office during the teacher’s tutorial times published on the students’ Virtual Campus.

3. COURSE DESCRIPTION

It provides an overview of the elements involved in the creation and elaboration of an audiovisual work: radio and television production and postproduction, photography, lighting, radio and television, non-linear editing and graphics, through technical skills and abilities through practical experimentation. Technical and aesthetic knowledge related to the language of sound, light and photography in audiovisual works, which enables students to reflect and critically analyze any audiovisual creation. Knowledge related to the phases of production, locution, staging, recording, non-linear editing, graphics and postproduction, which constitute the process of creating an audiovisual work or product and whose conjunction defines the style, whether of the creator or work.

4. COMPETENCIES

1.- COMPETENCIES

<table>
<thead>
<tr>
<th>Code</th>
<th>Basic and General Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS1</td>
<td>Students should have demonstrated that they have gained knowledge of and understand an area of study that starts from the base of general secondary education, and is usually seen as a level that, even though based on advanced text books, it also includes certain aspects that imply knowledge deriving from the vanguard of their field of study.</td>
</tr>
<tr>
<td>BS2</td>
<td>Students should know how to apply their knowledge to their work or vocation in a professional manner and should have the skills that are usually demonstrated by compiling and defending arguments and resolving problems within their area of study.</td>
</tr>
<tr>
<td>BS3</td>
<td>Students should have the capacity to collect and interpret relevant data (normally within their area of study) to give opinions that include reflection on relevant topics of a social, scientific or ethical nature.</td>
</tr>
<tr>
<td>BS4</td>
<td>Students should be capable of transmitting information, ideas, problems and solutions to both a specialist and non-specialist public.</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Specific Competencies</th>
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</thead>
<tbody>
<tr>
<td>SC33</td>
<td>Acquisition of theoretical and practical knowledge of how the different processes of audiovisual creation and production function in radio and television productions by providing students with the pertinent technical skills and dexterity.</td>
</tr>
<tr>
<td>SC34</td>
<td>Capacity to plan and manage efficiently the human, technical and budget resources of audiovisual products in the different media.</td>
</tr>
<tr>
<td>SC35</td>
<td>Capacity to use the different techniques of lighting, sound, voice, production, non-linear editing, graphic design and post-production as well as their aesthetic and creative applications according to the different types of audiovisual products.</td>
</tr>
</tbody>
</table>
5. LEARNING ACTIVITIES

1.- DISTRIBUTION OF STUDENTS’ ASSIGNMENT:

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>On-campus hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA2</td>
<td>SEM - Seminar</td>
<td>30</td>
</tr>
<tr>
<td>LA3</td>
<td>TL - Workshop</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Presence Hours</td>
<td>60</td>
</tr>
</tbody>
</table>

2.- DESCRIPTION OF LEARNING ACTIVITIES:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA2 Seminar</td>
<td>Educational activity that strengthens the participation of students in the reasoned interpretation of the knowledge and the sources of the area of study. It is aimed preferably at the skill of applying knowledge (skill 2 MECES), and the capacity to collect, interpret and give opinion on relevant data and information (skill 3 MECES). It is representative of areas or activities of a mixed profile, theoretical and practical.</td>
</tr>
<tr>
<td>LA3 Workshop</td>
<td>Educational activity aimed preferably at the acquisition of skills for the transmission of knowledge (skill 4 MECES) and representative of areas of a more methodological nature. It prepares students for written and oral communication and the transmission of knowledge.</td>
</tr>
<tr>
<td>LA7 Self-Student Work</td>
<td>Educational activity in which students independently manage their own learning by virtue of study of educational material.</td>
</tr>
</tbody>
</table>

6. ASSESSMENT OF LEARNING

1.- CLASS ATTENDANCE:

- In order to be eligible for examination by continuous assessment students must attend at least 75% of scheduled class time (attendance sheets will be used). As students may be absent 25% of the classes, no attenuating circumstances will be accepted for absences.
- 80% attendance at practical classes is required.
- Attendance to conferences organized by the Faculty, specific to the degree or linked to a subject, are considered of great interest for the training of students and the acquisition of skills. Therefore, accredited assistance to these activities may be recognized by the teacher as part of teaching imparted.

2.- ASSESSMENT SYSTEM AND CRITERIA:
### ORDINARY EXAMINATION (continuous assessment)

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS4</td>
<td>PR - Assessment of Practical Activities and Simulations</td>
<td>50%</td>
</tr>
<tr>
<td>AS2</td>
<td>EX – Written Exam</td>
<td>25%</td>
</tr>
<tr>
<td>AS2</td>
<td>EX – Written Exam (midterm)</td>
<td>10%</td>
</tr>
<tr>
<td>AS1</td>
<td>DS – Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>AS5</td>
<td>TR – Assessment of Papers and Projects</td>
<td>5%</td>
</tr>
</tbody>
</table>

### RE-TAKE EXAM/EXTRAORDINARY EXAMINATION

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS2</td>
<td>EX – Written Exam</td>
<td>40%</td>
</tr>
<tr>
<td>AS4</td>
<td>PR – Practical Exam</td>
<td>50%</td>
</tr>
<tr>
<td>AS5</td>
<td>TR – Assessment of Papers and Projects</td>
<td>10%</td>
</tr>
</tbody>
</table>

### 3.- DESCRIPTION OF ASSESSMENT CRITERIA:

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS1 Presentation</td>
<td>Oral presentations in seminars or working groups.</td>
</tr>
<tr>
<td>AS2 Written Exam</td>
<td>Tests, short-question and essay-question exams, exercises, case studies and analysis of legal matters.</td>
</tr>
<tr>
<td>AS4 Assessment of Practical Activities and Simulations</td>
<td></td>
</tr>
<tr>
<td>AS5 Assessment of Papers and Projects</td>
<td>Reviews, research projects, reports, opinion articles…</td>
</tr>
</tbody>
</table>
### 1.- COURSE PROGRAMME:

#### THEORETICAL PROGRAM:

**Unit 1 - PHYSICAL KNOWLEDGE OF THE LIGHT**
- The composition of light
- Wave and corpuscular theories
- Newton - the white light - the spectrum
- Electromagnetic waves
- The duality of light

**Unit 2 - BEHAVIOR OF THE LIGHT**
- Propagation of light
- The absorption
- The broadcast
- Reflection
- Refraction
- The dispersion
- Diffraction
- The polarization

**Unit 3 - LIGHTING FOR PHOTOGRAPHY, CINEMA AND TV**
- Light in space
- Hard sources - soft fonts
- The amount of light
- The direction of light
- Quality of light
- Color of light (color temperature)

**Unit 4 - EYE AND VISION PHYSIOTHERAPY**
- The eye and the vision
- Photopic and scotopic view
- Visual acuity
- The Weber-Fechner Law
- Similarities of the eye with the camera

**Unit 5 - IMAGE CAPTURE INSTRUMENTS (THE CAMERA)**
- The darkroom
- Lens types
- The photometer
- The control of light and its measurement
- Cutting Factor
- Setting and controlling the lighting contrast
  - DSLR cameras for video

**Unit 6 - BASIC ILLUMINATION INSTRUMENTS**
- Glow Lamps
- Arcs and discharge lamps
- Led lamps
- Projector types: spot, soft, for cycloramas
  - Supports for lighting fixtures and other lighting accessories

**Unit 7 - AESTHETIC AND EXPRESSIVE EMPLOYMENT OF LIGHTING**
- Light in the painting
- Light in the cinema
- Situations of lighting
Unit 8 - THE LIGHT IN THE HISTORY OF THE FILM
- Russian cinema
- Surrealism
- Expressionist cine
- Realism and neorealism
- North American black belt
- Nouvelle vague
- Naturalism
- Neo noir

PRACTICE PROGRAM:

Practice 1 PHYSICAL PROPERTIES OF LIGHT
- Experimentation of absorption, transmission, reflection, dispersion, refraction and diffraction of light.
- Propagation of light: Measure the light intensity to experience the law of the inverse square

Practice 2 LIGHTING WITH A FOCUS
- A focus per group. Test and record multiple angles with a focus. Use of diffusers and color gel.
- Noticing the value of diaphragm used in each plane and the aesthetic significance achieved.
- View and comment in class each plane

Practice 3 ILLUMINATION WITH TWO FOCUSES
- Lighting with two spotlights. Contrast ratio with incident light photometer
- Organization in groups for final short film

Practice 4 LIGHTING OF THREE POINTS
- Lighting with three spotlights. Contrast ratio with incident light photometer
- Light background and ambient light
- Preproduction short films

Practice 5 NATURAL LIGHT AND ETALONAJE
- American Night Recording and Editing
- Recording with natural light. Statics
- Basic baseline basics with Final Cut 7

Practice 6 ILLUMINATION OF AN INTERVIEW
- Preparation of the lighting of an interview
- Preproduction short films

Practice 7 CHROMA-KEY
- Lighting, recording and insertion in chroma-key editing

Practice 8 RUNNING FINAL SHORT FILM
- Round of the final short films

Practice 9 RENDERING / ASSEMBLY FINAL SHORT FILM
- Filming or editing of final short films

Practice 10 PRACTICAL EXAM
- Practical exam of the contents taught in class

8. RECOMMENDED READING

1.- ESSENTIAL BIBLIOGRAPHY:
2. ADDITIONAL BIBLIOGRAPHY:

BERMINGHAM, ALAN, (2010), Iluminación de Localizaciones para Televisión, Madrid, IRTVE.
BERNHART, J. (1977): Iluminación para televisión en color, Madrid, IORTV.
LOISELEUX, Jacques, (2005), La luz en el cine, Barcelona, Ediciones Paidós Ibérica, S.A.
MARCHESI, Jost (2003), Técnicas de Iluminación Profesional, Suiza, Verlag Photographe.
MILLERSON, G. (2001), Realización y Producción en Televisión, Madrid, IORTV.
MILLERSON, G. (2007), Técnicas de Realización y Producción en Televisión, Madrid, IORTV.
SIMPSON, Robert S. (2003), Control de la iluminación. Tecnología y aplicaciones, Guipúzcoa, Escuela de cine y vídeo

4. WEB RESOURCES:

https://directordefotografia.wordpress.com/
http://www.aftcinema.com/?lang=fr
http://www.arrit.com/
http://www.ben-ri.com/es/company.html
http://www.desisti.it/
http://www.ianiro.com/
http://www.k5600.com/
http://www.kinoflo.com/
http://www.litepanels.com/
http://www.lowel.com/
http://www.theasc.com/

9. ATTITUDE IN THE CLASSROOM

1. REGULATIONS

Any irregular act of academic integrity (no reference to cited sources, plagiarism of work or inappropriate use of prohibited information during examinations) or signing the attendance sheet for fellow students not present in class will result in the student not being eligible for continuous assessment and possibly being penalized according to the University regulations.