



ESCUELA UNIVERSITARIA
DE ARTES. MADRID

Light Engineering and Grip

COURSE GUIDE

BACHELOR'S IN FILMMAKING

COURSE 2026/2027



Universidad
Rey Juan Carlos

Course data

<i>Duration</i>	Annual
<i>Credits</i>	6 ECTS
<i>Modality</i>	In-person
<i>Language</i>	English
<i>Faculty</i>	Filmmaking
<i>Teacher</i>	Javier Cebriá

Course presentation

Work processes in the lighting and machining department based on applied knowledge of electricity, lighting sources and machinery.

Student competencies

CG01	Utilize different historical, sociologic, cultural and/or artistic sources in the creation of audiovisual projects.
CG03	Know the codes of ethics and deontology applicable to the audiovisual industry.
CG04	Know the various applications of the technological resources from the field of audiovisual creation.
CG05	Understand the concepts of photography, the creation of the film image and audiovisual language from an artistic and technical perspective.
CE03	Know the production workflows of the audiovisual industry.
CE07	Understand the importance of the various roles, tasks and responsibilities related to the development of audiovisual projects.
CE17	Understand the possibilities offered by film technology and light engineering to create specific settings and atmospheres.
CE18	Work with different image capture technologies in accordance with the needs of the project.

Learning outcomes

Upon completion of this course, each student must be able to:

1. Know the basic laws of electricity, its distribution and wiring.
2. Know the types of light sources and contextualize them within the history of film.

3. Easily handle the lighting and grip equipment, in accordance with established safety rules.
4. Get a set ready for shooting in all aspects related to lighting and grip.
5. Manage the work of a lighting and grip team.

Teaching methodology

MD1	Participatory masterclass.
MD2	Case studies and discussion.
MD3	Problem resolution and discussion of results.
MD5	Cooperative and collaborative learning.
MD6	Academic tutoring.

Course content

Content	The workings of a lighting and grip department, through the applied knowledge of electricity, light sources and grip equipment. 1. The importance of hierarchy in the work of the technical team. 2. The lighting team. 3. The grip team. 4. Electricity, electrical distribution and safe use. Ohm's law. The concept of electrical power. Lines and wiring. Electricity measurements. Electricity safety. 5. Lighting in filmmaking: characteristics, light sources, types of lamps and lighting accessories. 6. Grip equipment: types of mounts for camera movements. 7. Work dynamics on a film set.
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Learning activities

AF1	Theoretical and theoretical-practical classes.	15 hours
AF2	Classroom/laboratory exercises and practices.	24 hours
AF4	Art appreciation activities: attendance at seminars, visits to exhibitions or viewing of visual/audiovisual works.	12 hours
AF5	Search and selection of documentation, reading of supporting material and bibliographic and visual references.	60 hours
AF6	Academic tutoring.	6 hours
AF7	Evaluation.	3 hours

AF8	Autonomous study of theoretical content and autonomous preparation of practical work and activities.	60 hours
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* *The distribution of hours between training activities may undergo changes due to the academic needs of the course, the group and/or the teaching team.*

Assessment

GENERAL ASSESSMENT CRITERIA

ATTENDANCE

The classes are in-person, and attendance is mandatory, as it is a determining factor in the continuous assessment system, as well as in class attitude and participation. However, in exceptional cases due to health situations or family reconciliation, students may request online access as a methodological adaptation (for more information, please contact the student department).

MARKS

Continuous Assessment is a comprehensive assessment of each student's results judged on the assessment criteria described in the following section, on a scale of 0 to 10 as provided in current legislation.

Students wishing to bring up their grade in the extraordinary/re-assessment period must first contact the Registrar's Office to expressly waive in writing all of the marks they obtained in the regular assessment period. Their final assessment mark will be the mark obtained in re-assessment.

SPELLING AND EXPRESSION

Spelling and written expression are taken into account in the marking of written examinations and assignments. Written examinations cannot contain more than 2 spelling errors or 10 accent errors (omitted or misplaced). Assignments completed outside of the classroom may not contain more than 1 error.

UNIVERSITY WRITTEN REPORTS

These must have a title page, table of contents and bibliography listing at least 4 sources. These works must be original. Excerpts from other authors must be properly cited. Demonstrable plagiarism is an academic offense. If one student copies the work of another student, both shall be held accountable.

SPECIFIC ASSESSMENT CRITERIA

REGULAR ASSESSMENT PERIOD

The teaching team will provide the details/specifications on the content or submission of assessment tasks; this information will be given in class or in a document made available to the student on the Virtual Course Space (in Spanish, *Aula Virtual*).

Assignments not submitted by the deadlines set by the teaching team will receive an assessment mark of 0.

<i>Assessment task (*)</i>	<i>Revaluable/non-revaluable</i>	<i>Minimum mark yes/no</i>	<i>% of final mark</i>
SE1 In-class tests and examinations (oral and/or written)	Reevaluable	Yes	50%
SE3 Continuous assessment: weekly tasks and homework, periodical reports, problem resolution	Non reevaluable	Yes	40%
SE5 Attitude and participation	Non reevaluable	No	10%
			100%

(*) Records and evidence of all of the assessment tasks (writings, recordings, etc.) listed in this table will be kept and filed in the Registrar's Office.

EXTRAORDINARY/RE-ASSESSMENT PERIOD

Students that do not pass the course in the term it is delivered can attempt again in the extraordinary/re-assessment period, except in cases where the characteristics of the course make this impossible.

The teaching team will inform the student of the assessment tasks that will need to be done in re-assessment. The teaching team can decide whether to maintain the marks of 5.0 and above the student received over the course and in the regular assessment period.

REVIEW OF ASSESSMENT MARKS

As set out in the TAI School of the Arts Student Handbook.

Resources

RECOMMENDED BIBLIOGRAPHY

Box, H. C. (2020). *Set lighting technician's handbook: Film lighting equipment, practice, and electrical distribution* (5th ed.). Routledge.

Brown, B. (2021). *Cinematography: Theory and practice: For cinematographers and directors* (4th ed.). Routledge.

RECOMMENDED FILMOGRAPHY

Bong, J. H. (Director). (2019). *Parasite* [Gisaengchung]. Barunson E&A; CJ Entertainment.



Phillips, T. (Director). (2019). *Joker*. Warner Bros. Pictures.

Villeneuve, D. (Director). (2013). *Prisoners*. Alcon Entertainment; Warner Bros. Pictures.

Villeneuve, D. (Director). (2017). *Blade Runner 2049*. Alcon Entertainment; Columbia Pictures.

RECOMMENDED WEBSITES

filmlights [@filmlights]. (n.d.). *Posts* [Instagram profile]. Instagram.

REQUIRED MATERIALS FOR THE COURSE

Paper and pen.
Gaffer Gloves.

VISITS, MASTER CLASSES, EVENTS AND ADDITIONAL WORKSHOPS

MicroSalónAEC