uc3m Universidad Carlos III de Madrid

Digital Post-production

Academic Year: (2022 / 2023) Review date: 05-07-2022

Department assigned to the subject: Communication and Media Studies Department

Coordinating teacher: UTRAY DELGADO, FRANCISCO

Type: Compulsory ECTS Credits: 6.0

Year: 3 Semester: 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Subject / s with use of audio visual production equipment: camera, sound, editing and post-production.

OBJECTIVES

- 1. Knowledge and approach to the video editing basis and the techniques and digital post-production processes.
- 2. Knowledge of technical and operational systems of the current editing and digital post-production equipments.
- 3. Ability to identify the various possibilities offered by digital post-production equipments: digital composition, digital effects, 2D/3D graphics & animation.
- 4. Capacity to operate post-production and video editing equipments.
- 5. Ability to assume post-production responsibilities in the post-production process.

DESCRIPTION OF CONTENTS: PROGRAMME

- M1. Digital Compositing
 - Workflow
 - Matte creation and editting
 - Chroma Key
 - 3D compositing
 - Motion graphics
 - Typographic animation
- M2. Digital image compression
- M3. Color correction
- M4. Motion control

This subject is recognised as experimental, and has seven additional hours in audiovisual laboratory workshops. Recording with chroma key for VFX. Creative workshop to learn how to record video with chroma key backgrounds for visual effects. These experimental practice sessions will be held on the sets of the laboratories that are available and with portable chroma key backgrounds for outdoors.

LEARNING ACTIVITIES AND METHODOLOGY

- THEORETICAL AND PRACTICAL CLASSES. Theoretical classes for the acquisition of basic notions of audiovisual image technology and technique.
- TUTORIALS. Individual (individual tutorials) or group (group tutorials) assistance to students by the teacher.
- INDIVIDUAL OR GROUP WORK BY THE STUDENT
- WORKSHOPS AND LABORATORIES

ASSESSMENT SYSTEM

Continuous assessment metod based on the preparation and delivery of assignments within a given time frame, partial exams, as well as class participation and the assessment exercises provided by the teacher. End-of-term-examination: submission of a corrected portfolio.

Students who are not able to take advantage of the continuous assessment metod will be required to present practical assignments and complete a final exam which will assess globally the knowledge, skills and abilities acquired throughout the course. During the second examination opportunity, students will also be able to take a theoretical-practical exam with a value of 100% of the final grade for the subject.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals):	40

BASIC BIBLIOGRAPHY

- Brinkman, R. The art and science of Digital Compositing. Techniques for visual effects, animation and motion graphics, Morgan Kauffman, 2008
- Dobbert, Tim Matchmoving. The invisible art of Camera Tracking. , Sybex, Wiley, 2013
- Hornung, Erica The Art and Technique of Matchmoving. Solutions for the VFX Artist, Focal Press, 2010
- Hullfish, Steve The Art and Technique of Digital Color Correction (2dn edition), Focal Press, 2013
- Prieto Souto, X. y Doménech González, G. Respirar con la imagen. Conversaciones sobre montaje con Teresa Font., TECMERIN, 2019
- Rajas, Mario y Álvarez, Sergio (eds.) Tecnologías audiovisuales en la era digital, Fragua, 2014
- Utray, F., Armenteros, M. & Benítez, A.J. Postproducción digital. Una perspectiva contemporánea, Dykinson, 2015
- Van Hurkman, Alexis Color Correction Handbook: Professional Techniques for Video and Cinema (2nd Edition), Peachpitpress, 2013
- White, T. Animación del lápiz al pixel. Técnicas clásicas para animadores digitales., Omega, 2010
- Wright, Steve Digital Compositing for Film and Video (4th edition), Routledge, 2017

ADDITIONAL BIBLIOGRAPHY

- Dion Scoppettuolo The Beginner¿s Guide to DaVinci Resolve, Blackmagic Design, 2021
- Selby, Andrew Animación. Nuevos proyectos y procesos creativos., Parramón ediciones., 2009.
- White, Tony Animación del lápiz al pixel. Técnicas clásicas para animadores digitales., Omega., 2010.

BASIC ELECTRONIC RESOURCES

- Utray, F. . Production and delivery in Ultra HD and 4K: https://e-archivo.uc3m.es/handle/10016/23461