uc3m Universidad Carlos III de Madrid

Forensic Science I

Academic Year: (2022 / 2023) Review date: 20-06-2022

Department assigned to the subject: Mechanical Engineering Department, Transversal matters

Coordinating teacher: LUIS GARCÍA, JUAN Type: Compulsory ECTS Credits : 3.0

Year: 3 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

None.

OBJECTIVES

The abilities adquired by the students are the next:

- To apply correctly the methods, procedures and technics of research in order to resolve crimes.

To reach this goal is necessary to obtain the following results of learning:

- Knowing the methods, procedures and technics of research that, from the point of view of the current tecnology, help the resolve of crimes.

DESCRIPTION OF CONTENTS: PROGRAMME

Tecnologies applied to the obtaining of data and evidences. General information about Biomedicine. Identification of persons: Automated systems of investigation (fingerprint identification, biometry, antropometry) biological evidences (DNA, forensic genetics, forensic chemistry) and digital evidences (computer forensics).

LEARNING ACTIVITIES AND METHODOLOGY

Activities on-line and in-person are including with the help of teachers.

- ECTS face-to-face: 2.4 credits of each subject of 6 ECTS are suitable for workshops with the help of teachers (lecturers, classes for resolving problems and dubts in reduced groups, laboratory sessions, presentations made by students).
- ECTS on-line: 3.6 credits of each subject of 6 ECTS are suitable for personal working of the students (studies, producing of reports, tests, and so on).

The half of learning activities (3ECTS of each 6 ECTS subjects) are aimed to the adquisition of theoretical knowllegment. The rest of credits are aimed to the adquisition of practical abilities in relation to the programme of each subject.

The 10% of the sessions will be presential tutorships.

ASSESSMENT SYSTEM

The evaluation system includes the partial evaluation of the student's work (works, reports of laboratory practices and/or tests of evaluation of skills and theoretical-practical knowledge) and the final evaluation through a final written exam in which the knowledge, skills and abilities acquired during the course will be evaluated. Therefore, the percentages assigned in the course will be the following: 60% (continuous evaluation) and 40% (final evaluation).

Within the partial assessment, the course is divided into three different Didactic Units (UD 1, UD 2, UD 3) that will have the same specific weight (arithmetic mean), and each UD will consist of works and/or tests of theoretical evaluation-practical (partial exams). In the case that there are works and partial exams within the same UD, the specific weight of each test in that UD will be the following: 60% (partial exam) and 40% (works).

Regarding the final evaluation, all students must assist to a final written exam, which will have the value specified in the initial paragraph.

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

BASIC BIBLIOGRAPHY

- Antón Barberá Manual de Técnica Policial, Tirant lo Blanch , 1991
- Beatriz Miguélez Garrido CIENCIAS FORENSES I: Química Forense, CUGC, 2020
- Emilio Verón Bustillo (Coordinador y coautor) y Juan Luis Barrios Dolader (Coautor). La Inspección Técnico Ocular: Aspectos técnicos y jurídicos., Centro Universitario de la Guardia Civil, 2022
- Guardia Civil Manual de Policía Judicial de la Guardia Civil, Guardia Civil, 2011
- José Ibañez Peinado Técnicas de investigación criminal, Dykinson SL, 2012
- Juan Luis Barrios Dolader (Coordinador); Ángel Tomás Ledo Iglesias CIENCIAS FORENSES I: Informática Forense, CUGC, 2020
- Juan Luis Barrios Dolader (Coordinador); Ángel Tomás Ledo Iglesias CIENCIAS FORENSES I: Informática Forense, CUGC, 2020