Study Programme: Master academic studies of forensics

Course Unit Title: Traffic accident traseology

Course Unit Code: SF-07

Name of Lecturer(s): Full Professor Vuk Bogdanović, Associate Professor Zoran Papić

Type and Level of Studies: Master Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

Acquiring knowledge in the field of traffic accident traseology, i.e. the traces etiology and methods for road accident traces identification, positioning, collecting and interpretation in order to create the basis for determining the vehicle pre impact, impact and post impact speed, place of the impact and time-distance analysis. In addition, the aim of the course is acquiring knowledge about modern tools and methods used to identify and collect traces that occur in road accidents, as well as procedures for determining an accident scene characteristics.

Learning Outcomes:

After acquiring knowledge, the student is able to:

1. uses measuring devices and software tools for the accident scene investigation;
2. applies modern methods of forensic analysis for the accident traces and their detection;
3. identify and correctly interprets the traces resulting from road accidents and other harmful traffic events.

Syllabus:

Theory

Origin of traces that occur in road accidents. Marks on the road surface and the road surroundings which occurred as a result of an accident, caused by vehicles and other participants. Marks on the vehicle exterior and interior. Identification and measuring of vehicles deformations. Marks on the other accident participants such as pedestrians, cyclist and animals. Marks on objects located in the accident scene. Application of modern methods - photogrammetry for traces positioning. Application of software tools for the accident scene processing. Methods for determining the characteristics of the horizontal route, road cross section and intersection profiles. Identification and interpretation of signal and phase plans. Data identification by processing of the traffic video surveillance from nearby objects.

Practice

Accident traces processing and identification, their measuring, photographing and applying various tools with the aim of tracks positioning.

Required Reading:

1. Vodinelić, V. i dr., Saobraćajna kriminalistika, Savremena administracija, Beograd, 1986.
2. Lipovac, K., Uviđaj saobraćajnih nezgoda- Fotografisanje, Viša škola unutrašnjih poslova, Beograd 1997.
3. Lipovac, K., i dr., Uviđaj saobraćajnih nezgoda-Elementi saobraćajne trasologije, Viša škola unutrašnjih poslova,Beograd 2000.
4. Kostić S., Tehnika bezbednosti i kontrole saobraćaja, FTN Novi Sad, 2009.
5. Rotim F., Forenzika promentnih nezgoda, Zagreb, 2011.

Weekly Contact Hours: 5(75)	**Lectures:** 3(45)	**Practical work:** 2(30)

Teaching Methods:

Lectures, experimental exercises and consultations.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	30
Practical work	10	oral exam	20
Seminar(s)	20	practical exam	10