

Study Programme: Master academic studies of forensics			
Course Unit Title: Fire on motor vehicles			
Course Unit Code: SF-04			
Name of Lecturer(s): Associate Professor Mirjana Laban, Assistant Professor Dragan Ružić			
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 theoretical and practical knowledge which is necessary to explore the circumstances and causes of the motor vehicles fire origin.			
Learning Outcomes: After acquiring knowledge, the student is able to: <ol style="list-style-type: none"> 1. Independently applies knowledge in the field of motor vehicles fires; 2. Identifies causes and circumstances related to the fire occurrence; 3. Apply knowledge in the field of forensic engineering and sampling techniques and to analyze evidence materials produced by motor vehicles fire. 			
Syllabus: <i>Theory</i> The concept of fire. Combustion and conditions for combustion. Heat transfer. Substance classification depending on burning. Fire causes. Fire causes investigation. Fire traces observation, analysis and their interpretation. Methods used to determine the location of the initial fire. Fuel substances and causes of motor vehicles fires. A fire caused by friction sparks. Firing due to electrical failure. A fire caused by vehicle overheating. Vehicle fire caused by open flames. Intentional fires. Vehicle fire caused by poor maintenance and negligence. A fire caused by transported goods in vehicles. <i>Practice</i> Laboratory methods in the vehicles fire expertise procedures. Contemporary information technologies used in fire research. Case studies.			
Required Reading: 1. Đovčoš, M., Veštačenje požara i eksplozija, AGM knjiga, Beograd, 2015, p. 147, ISBN 978-86-86363-52-7 2. Pačelat, R., Zorić, Z., Istraživanje uzroka požara, Zavod za istraživanje i razvoj sigurnosti, Zagreb, 2003, p. 270, ISBN 953-6412-53-5 3. Noon, R., Forensic Engineering Investigation, CRC Press LLC, Boca Raton, Florida, 2001			
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