<table>
<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">FORENSIC TRACE PROCESSING</td></tr>
<tr><td>Code</td><td>FZ204</td><td>Year of study</td><td colspan="4">1</td></tr>
<tr><td>Course teacher</td><td>Šimun Anđelinović, MD, PhD, Full professor</td><td>Credits (ECTS)</td><td colspan="4">5</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2">Ivana Kruzić, PhD, associate professor
Ivan Jerković, PhD
Ana Banovac, MSc
Toni Ljubic, MSc</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>F</td></tr>
<tr><td>20</td><td>15</td><td>20</td><td></td></tr>
<tr><td>Status of the course</td><td>Mandatory</td><td>Percentage of application of e-learning</td><td colspan="4">/</td></tr>
<tr><td colspan="6">COURSE DESCRIPTION</td></tr>
<tr><td>Course objectives</td><td colspan="5">The course in forensic trace processing, which focuses on the study of material evidence in criminal cases, which is the starting point in all areas of forensics, and goals of this course are:
a) to learn about the history of the development and organization of forensic institutions, associations and laboratories at home and abroad
b) introduction to the scientific methods by which material trace becomes physical evidence;
c) The definition and adoption of the term scientifically verified physical evidence as the final product of forensic investigation that is presented to the judicial system.
d) A detailed study of the proper operation and processing of all types of traces with a special focus on material evidence and conduct in forensic laboratory.
e) A detailed study of the general and specific knowledge that should ensure understanding of the formal and procedural approach to traces, as well as their material - procedural conversion to material evidence.
f) Introduction to the accreditation in forensics and in forensic laboratories.</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="5">Requirements for course enrollment are defined by the Regulations at the University Department of Forensic Sciences and by the Regulations on Studies and System of Studies at the University of Split.</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="5">After successfully mastering the course, students will be able to:
1. Identify the term forensic trace processing and connections, objectives, subjects, organization and purpose of the forensic labs, forensic international cooperation and data exchange.
2. Select the methods and purpose of access to material evidence and documentation of implemented measures and actions.
3. Determine the measures of personal protection during forensic processing of material traces and forensic work.
4. Organize the distribution of the time required for specific expertise (Forensic Time Management), the creation of the priority tasks, paying attention to detail and their interpretation skills and complex approach to procedures and actions during the expertise.
5. Evaluate the link between this course with other courses, and its contribution to further forensic education.
6. Critically evaluate forensic traces, course of their analysis and expected results.
7. Critically discuss on the awareness of the existence of different points of view.</td></tr>
</table>

	8. Critically evaluate and make decisions in different situations and make decisions accordingly. 9. Evaluate the results of instrumental chemical-physical methods in forensics. 10. Evaluate the acquired knowledge about scientific verified material evidence as the final product forensic research.

Course content broken down in detail by weekly class schedule (syllabus)

Type of class	Teaching unit	Hour (s)
L-1	Introduction to material evidence: the concept, methods, type and importance. Terms forensic trace processing and expert trace. From trace to the evidence. The historical development of forensic science and forensic institutions in the world and in our country. Development, organization and activities of Forensic Science Centre "Ivan Vučetić".	5
S-1	From trace on crime scene to material evidence on court. Protection, ensurance, fixation and storage of evidence. Chain of evidence and it's meaning.	3
E-1	Rules in trace handling – case studies	2
L-2	Trace delivery for expert analysis. Supporting documentation. General procedures in forensic trace processing. Work with traces during forensic processing / expertise. Standards in forensic trace processing.	3
E-2	Orders /requests for expertise - development and analysis.	2
S-2	Formal investigation report- content and methodology of writing. Rules for keeping Chain of evidence unbroken. Control of delivered traces for expert analysis, description and work log.	3
E-3	Forms and protocols for forensic trace processing. Drawing up of expert report in different cases.	2
P-3	Fingerprint traces: term, types, significance, specificities in treatment. Methodology for on site or laboratory forensic trace processingu. Dactyloscopy and dactiloscopy expertise. AFIS	2
S-3	Methods of forensic trace processing of fingerprints on site or in laboratory.	1
E-3	Forensic trace processing of latent fingerprints.	2
L-4	Footprints, bite marks, tire tracks; specificities in processing	2

	E-4	Dactyloscopy. AFIS.	3
	L-5	Biological traces. Traces of human and animal origin. Forensic trace processing.	3
	E-4	Bloodstains: crime scene processing. Preliminary test for blood and other bodily fluids.	2
	L-6	Micro trace: term, types, forensic trace processing of.	2
	S-4	Collection and comparison of fiber micro traces.	1
	E-5	Traces of dirt and glass – forensic trace processing of.	2
	L-7	Fire arms and traces of its use.	2
	S-5	Identification of weapon. Traces of fire arm usage on a target.	3
	E-6	Forensic trace processing of bullets and shell casings. Estimation of firing distance through analysis of traces located on clothes.	2
	S-6	Forensic trace processing of tools – burglary tools, locks	2
	E-7	Forensic trace processing of typewriters, printers and copy machines	2
	L-8	Traces of drugs and poisons.	1
	S-8	Elements of forensic investigation of drug abuse	2
	V-8	Preliminary testing of trace suspected to be drugs.	2

Format of instruction	☒ lectures ☒ seminars and workshops ☒ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)	
Student responsibilities	Students are required to: a) attend lectures, seminars and exercises; b) write and present a seminar paper; c) pass the written exam.		

Screening student work *(name the proportion of ECTS*	Class attendance	0,5	Research		Practical training	1,5	
	Experimental		Report		(Other)		

<table>
<tr><td rowspan="4">credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>work</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,5</td><td>(Other)</td><td></td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td><td></td></tr>
<tr><td>Written exam</td><td>2,5</td><td>Project</td><td></td><td>(Other)</td><td></td><td></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="7"><u>Elements of assesment:</u>
1. Attending lectures: 0 – 10 points
2. Seminar essay 0 – 20 points
3. Written exam 0 – 70 points
Total possible points 100 points

For a positive evaluation it is necessary to score 60 out of 100 points and a minimum of half plus one point from the possible points on the elements of assessment under no. 2 and34.
Grade rating: excellent (5) - 90 to 100 points, very good (4) - 80 to 89 points, good (3) - 70 to 79 points, sufficient (2) - 60 to 69 points, less than 60 points - inadequate (1)</td></tr>
<tr><td rowspan="9">Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td colspan="2">Availability via other media</td></tr>
<tr><td colspan="3">Mršić G., i dr. (2014) Centar Ivan Vučetić, Hrvatska sveučilišna naklada, Zagreb</td><td>Knjižnica Odjela</td><td colspan="2"></td></tr>
<tr><td colspan="3">Modly D., Popović M., Mršić G., (2014) Osiguranje mjesta događaja, Hrvatska sveučilišna naklada, Zagreb</td><td>Knjižnica Odjela</td><td colspan="2"></td></tr>
<tr><td colspan="3">ENFSI Standing Committee on Quality & Competence, Best Practice' - An approach to optimizing the usefulness of forensic examinations</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">EN ISO IEC HRN 17025 i 17020.</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">ILAC, Guidelines for the Forensic Science Laboratories, ILAC-G19:2002</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">ILAC, Guidelines for the Selection and Use of Reference Materials, ILACG9:2005</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">CARNet – Forensic Science International</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">CARNet – Journal of Forensic Science</td><td></td><td colspan="2"></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="7">- Modly D., Mršić G., (2014) Uvod u kriminalistiku, Hrvatska sveučilišna naklada, Zagreb
- Mršić G., i dr. (2014) Forenzika dokumenata, novca i rukopisa, Hrvatska sveučilišna naklada, Zagreb
- Modly D., Mršić G. (2014) Suvremene kriminalističke teorije, Hrvatska sveučilišna naklada, Zagreb.
- Mršić G., Modly D., (2015) Istraživanje mjesta događaja I, Hrvatska sveučilišna naklada, Zagreb
- Mršić G., Modly D., Popović M. (2015) Istraživanje mjesta događaja II, Hrvatska sveučilišna naklada, Zagreb
- Materijali s predavanja i seminara</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of learning outcomes</td><td colspan="7">Analysis of success of the study in all courses in study progarmme
- Student survey on quality of teachers and teaching for each course in study programme
- Final exam conducted by course teacher examines all learning outcomes of course</td></tr>
</table>

Other (as the proposer wishes to add)		