

Fire and personal protective equipment

UWAGA: conducted in the winter semester

profile	general academics
degree	first degree
programme	ERASMUS
semester	1
part time / full time	full time
ECTS	5
coordinator	mł. bryg. dr inż. Agata Walczak

form of the activity: exercise

hours	30
prerequisites	Basic knowledge of mathematics and physics (a secondary school level), knowledge of mechanics, strength of materials and materials science, principles of technical drawing
objectives	The main aim of the course is to familiarise students with the fire and personal protective equipment
methods	Performing research, presentation
own work	Preparation of research reports
basic literature	Handbook of Fire Protection Engineering - Hurley Morgan J.
supplementary literature	

contents	hours
Measuring instruments, results analysis and statistics	6
Testing the fire fittings	4
Testing the fire hoses	4
Testing portable fire extinguishers	4
Microscopic analyses of changes in the surface layers of fire equipment	2
Testing the helmets	2
Microscopic analyses of materials used in personal protective equipment	2
Testing the strength of materials used in personal protective equipment	4
Operational and strength tests of portable fire ladders.	2

form of the activity: exercise

hours	30
prerequisites	Basic knowledge of mathematics and physics (a secondary school level), knowledge of mechanics, strength of materials and materials science, principles of technical drawing
objectives	The main aim of the course is to familiarise students with the fire and personal protective equipment
methods	Presentation, discussion
own work	Acquisition of knowledge acquired during classes
basic literature	Firefighters' Clothing and Equipment: Performance, Protection, and Comfort - Song Guowen. Crc Pr Inc 2018.
supplementary literature	

contents	hours
Division of rescue and firefighting equipment. Features of firefighting equipment	3
Fire machines and engines	6
Handheld firefighting equipment	4
Fire fittings and hoses	4
Fire helmets	4
Firefighter clothing and boots	3
Factors influencing the properties of personal protective equipment	6