Universida_{de}Vigo

Subject Guide 2017 / 2018

IDENTIFYIN	G DATA				
Forest Fires	5				
Subject	Forest Fires				
Code	P03G370V01802				
Study	(*)Grao en				
programme	Enxeñaría Forestal				
Descriptors	ECTS Credits		Choose	Year	Quadmester
	6		Optional	4th	2nd
Teaching	Galician				
language					
Department					
Coordinator	Fernández Alonso, José María				
Lecturers	Fernández Alonso, José María				
E-mail	txema182@gmail.com				
Web					
General	Technicians of prevention *an	d extinction of forest	*fires		
description					

Competencies

Code

B8	CG-08: Capacidade para identificar os diferentes elementos: recursos naturais renovables susceptibles de protección,
	conservación e aproveitamento.

B12 CG-12: Coñecemento dos procesos de degradación que afecten aos sistemas e recursos forestais: incendios.

B15 CG-15: Capacidade para o uso das técnicas de restauración hidrolóxico forestal.

C27 (*)CE-27: Capacidade para coñecer, comprender e utilizar os principios de: prevención e loita contra incendios forestais. D5 (*)CBI 5: Capacidade de xestión da información.

D6 (*)CBI 6: Adquirir capacidade de resolución de problemas.

D7 (*)CBI 7: Adquirir capacidade na toma de decisións.

D11 (*)CBP 4: Habilidades de razoamento crítico.

D13 (*)CBS 1: Aprendizaxe autónoma.

Learning outcomes				
Expected results from this subject		Training and Learning Results		
Identify he concept of forest fire, *his **caracteristicas *general *and he problem of wool *causality the different territorial *levels	B8 B12 B15	C27	D5 D6 D7 D11 D13	

Lana relation between competitions *and results, *and he weight of each competition inside wool matter show * in him *pdf *attach.

http://forestales.uvigo.es/sites/default/files/40%20Fires.*Pdf#**overlay-**context=are/**content/competitions-*and-resulted-of-*learning-by-matter

Contents	
Торіс	
1. Forest fires.	Definition. General characteristics. Causality. Socioeconomic implications. Statistics. Repercussion throughout the world, the Mediterranean and Spain.
2. Flammability and combustibility.	Heat transfer. Phases of combustion in case of fire. The temperature during forest fires.
3 forest fuels.	Typology. The physical-chemical behavior with influence in the world. Models of fuel.
4 Influence of meteorological and topographic factors on the spread of fire.	Relative humidity and temperature. Precipitation. Winds. Heat inversion. Electric storms. Atmospheric stability.
5 Variables of basic behavior of forest fires.	Empirical physical and empirical models of propagation. Prediction systems. The dynamics of high intensity fires. The factors they cause. Fires of glasses. Fires of points.

	Analysis of the causes. Determining sites. The educational legislation. Coercive work.
	The rates of fire hazard. Spanish system. Systems from America, Canada and Australia.
7 Preventive forestry. Activities related to forest fires.	Influence of problems in the planning of forest fires. Firewall and firewall areas.
	Preventive forestry techniques. Amendments arborea vegetation. Scrub fuel control techniques. The prescribed burning schedule. Ignition techniques. Execution. Evaluation.
8 Organization of a permanent fire protection	Operations.
structure.	Extinction techniques. Basic principles. Lines.Lineas control lines. Direct attack The indirect attack.
9. Hand tools and equipment for security personnel.	Means of aerial combat in it fires. Characteristics general types, advantages and use limitacións.El auga.Retardantes: types, effects and applications.
10 Influence of forest fires on ecosystems.	Adaptations of vegetation fires. Fire regimes. Post-secondary world. Impact of fire on the ground.
	Erosive effects of forest fires. Change the fire hydrologicos.Repelencia after the infiltration of water. Changes in the PTO.
11 Restoration of burned areas.	Actions to control erosion. Revegetación: Techniques, spices, advantages and limitations

Planning			
	Class hours	Hours outside the classroom	Total hours
Laboratory practises	10	20	30
Master Session	30	30	60
Practice in computer rooms	6	6	12
Autonomous troubleshooting and / or exercises	2	20	22
Outdoor study / field practices	6	6	12
Short answer tests	1	3	4
Troubleshooting and / or exercises	5	5	10
*The information in the planning table is for guidan	ice only and does n	ot take into account the hete	erogeneity of the students.

Methodologies	
	Description
Laboratory practises	Resolution of practical cases by students with educational orientation and the use of specific laboratory of materials and equipment
Master Session	Exposition of the content of the subject, the theoretical bases and / or guidelines for the realization of
	A work, the exercise or project to be developed by students
Practice in computer rooms	Practices in computer classrooms Present practice in computer rooms to solve practical assumptions of students with the orientation and use of specific programs and resources of the teaching team
Autonomous troubleshooting and / or exercises	Problem solving and / or autonomous problem solving exercises that students must solve in a personalized way outside the class throughout the course
Outdoor study / field practices	Practical exercise management tools and fire fighting equipment

All competences are type A, which they learn in all methodologies

Personalized attention	
Methodologies	Description
Laboratory practises	
Master Session	
Practice in computer rooms	
Outdoor study / field practices	
Autonomous troubleshooting and / or exercises	
Tests	Description
Short answer tests	

Assessment					
	Description	Qualification Trainin		ng and Learning Results	
Autonomous troubleshooting and / or exercises	*Approach of problems that he student has to resolve of personalised form *out of class to *the wide of him course	30	B8 B12 B15	C27	D6 D7 D13
Short answer tests	*Approach of questions of *brief answer that he student has to resolve in class in him act of evaluation	21	B8 B12 B15	C27	D11
Troubleshooting and / or exercises	*Approach of problems that he student has to resolve in class in him act of evaluation	49	B8 B12 B15	C27	D5 D6 D11 D13

Other comments on the Evaluation

All wools competitions are of type To *and evaluate * of conjoint *form **segun *the *procedures described previously.

Sources of information Basic Bibliography

Juli G. Pausas, ¿QUÉ SABEMOS DE...? Incendios forestales, CSIC e Catarata, 2012

Vega, J.A. e outros, Acciones urgentes contra la erosión en áreas forestales quemadas. Guía para su planificación en Galicia. Xunta de Galicia, 1, Fuegored, 2013

Complementary Bibliography

Arellano, S. e outros, Foto-Guía de combustibles forestales de Galicia. Versión I, 1, Andavira, 2016

Recommendations

Subjects that it is recommended to have taken before

Physics: Physics I/P03G370V01102 Physics: Physics II/P03G370V01202 Edaphology/P03G370V01302 Forestry/P03G370V01401