

UNIVERSIDAD DE CASTILLA - LA MANCHA GUÍA DOCENTE

1. General information

Course: FOREST GENETICS AND IMPROVEMENT

Type: CORE COURSE

Degree: 365 - UNDERGRADUATE DEGREE PROGRAMME IN FOREST AND ENVIRONMENTAL ENGINEERING

Center: 601 - E.T.S. AGRICULTURAL ENGINEERS AND MOUNTS AB

Year: 3 Main language: Spanish

Use of additional

languages: Web site:

Code: 62322 ECTS credits: 6

Academic year: 2021-22

Group(s): 10

Duration: First semester

Second language: English

English Friendly: Y

Bilingual: Y

Lecturer: JOSE ANTONIO FERNANDEZ PEREZ - Group(s): 10						
Building/Office	Department	Phone number	Email	Office hours		
IIDB/Biotecnología	CIENCIA Y TECNOLOGÍA AGROFORESTAL Y GENÉTICA	2611	joseantonio.fperez@uclm.es			

2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Not established

4. Degree competences achieved in this course

Course competences

E30

G01 Knowledge of foreign language

Description

G02

G03 Oral and written communication G04 Analysis and synthesis capacity G05 Organizational and planning skills G06 Information management capacity

Problem solving G07 Decision making G08 Teamwork G10 G11 Interpersonal skills

G12

G13 Autonomous learning

G18

G21 Ability to apply knowledge in practice G22 Basic knowledge of the profession

5. Objectives or Learning Outcomes

Course learning outcomes

Description

6. Units / Contents

Unit 1:

Unit 2: Unit 2.1

Unit 3:

Unit 4:

Unit 5:

Unit 6:

Unit 7:

Unit 8:

Unit 9:

Unit 10:

Unit 11: Unit 12:

Unit 13:

Unit 14: Unit 15: Unit 16: Unit 17: Unit 18: Unit 19:

7. Activities, Units/Modules and Methodology								
Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description	
Class Attendance (theory) [ON-SITE]	Lectures	E30 G04 G05 G06	1.11	29.97	N	-		
Group tutoring sessions [ON-SITE]	Combination of methods	E30 G03 G04 G06 G10 G12 G13	0.46	12.42	Υ	Υ		
Workshops or seminars [ON-SITE]	Combination of methods	E30 G08 G10 G11 G12 G18 G21 G22	0.09	2.43	Υ	Υ		
Laboratory practice or sessions [ON-SITE]	Combination of methods	E30 G12 G13 G21	0.56	15.12	Υ	Υ		
Study and Exam Preparation [OFF-SITE]	Combination of methods	G08 G10 G11 G18	3.78	102.06	N	-		
Total:				162				
	Total credits of in-class work: 2.22				Total class time hours: 59.94			
Total credits of out of class work: 3.78				Total hours of out of class work: 102.06				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System						
Evaluation System	Continuous assessment	Non- continuous evaluation*	Description			
Progress Tests	50.00%	0.00%				
Oral presentations assessment	20.00%	0.00%				
Assessment of active participation	5.00%	0.00%				
Laboratory sessions	25.00%	25.00%				
Final test	0.00%	75.00%				
Total:	100.00%	100.00%				

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Group tutoring sessions [PRESENCIAL][Combination of methods]	12.42
Workshops or seminars [PRESENCIAL][Combination of methods]	2.43
Unit 1 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.19
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
Unit 2 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
Unit 3 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
Unit 4 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
Unit 5 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
Unit 6 (de 19):	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.25

Unit 7 (64 91):	 Study and Exam Preparation [AUTÓNOMA][Combination of methods]	5
		Ü
Clase Alterhatance (theory) PRESENCIAL Lectures		Harma
Study and Exam Preparation (AUTONOMA (Combination of methods) Autonomical (Company) PRESENCIAL (Lactures) Autonomical (Company) Autonomical		
Units		
Activities Hours Study and Exam Preparation (JAUTONCOMA) Combination of methods) 4.5 July 18 (64 19): Hours Activities 1.26 Glass Altendance (theory) [PRESENCIAL] (Combination of methods) 7.56 Luboratory practice or sessions (PRESENCIAL) (Combination of methods) 4.5 Sudy and Exam Preparation (JAUTONCOMA) Combination of methods) 4.5 Unit 10 (64 19): Hours Activities Mours Solution and Exam Preparation (AUTONCOMA) Combination of methods) 8.2 Unit 10 (64 19): Hours Activities Hours Solution and Exam Preparation (AUTONCOMA) Combination of methods) 4.2 Unit 1 (64 19): Hours Activities Hours Soluty and Exam Preparation (AUTONCOMA) (Combination of methods) 4.2 Unit 2 (64 19): Hours Activities Hours Soluty and Exam Preparation (Heory) [PRESENCIAL] (Lectures) 1.25 Soluty and Exam Preparation (Heory) [PRESENCIAL] (Lectures) 2.82 Soluty and Exam Preparation (Heory) [PRESENCIAL] (Lectures) 2.82 Soluty and Exa		4.46
Class Allendarined theory PRESENCIAL		
Study and Exam Propuration AUTONOMA Combination of methods		
Moura 125	· · · · · · · · · · · · · · · · · · ·	
	Study and Exam Preparation [AUTÔNOMA][Combination of methods]	4.5
Class Attendance (theory) [PRESENCIAL] (Lectures) 1.25	Unit 9 (de 19):	
Laboratory practice or sessions PRESENCIAL [Combination of methods] 7.58 Study and Exam Preparation [AUTONOMA] (Combination of methods] 4.5 Unit 10 (de 19): Moura Class Attendance (theory) [PRESENCIAL] (Lectures] 2.92 Subdy and Exam Preparation [AUTONOMA] (Combination of methods] 1.25 Subdy and Exam Preparation (AUTONOMA] (Combination of methods) 4 Unit 11 (de 19): Hours Class Attendance (theory) [PRESENCIAL] (Lectures] 1.25 Study and Exam Preparation [AUTONOMA] (Combination of methods) 4 Unit 12 (de 19): 1.25 Study and Exam Preparation [AUTONOMA] (Combination of methods) 8.7 Unit 13 (de 19): Hours Class Attendance (theory) [PRESENCIAL] (Lectures) 2.82 Study and Exam Preparation [AUTONOMA] (Combination of methods) 4.74 Unit 13 (de 19): Hours Class Attendance (theory) [PRESENCIAL] (Lectures) 4.9 Study and Exam Preparation [AUTONOMA] (Combination of methods) 4.9 Unit 13 (de 19): Hours Class Attendance (theory) [PRESENCIAL] (Lectures) 4.9 Unit 13 (de 19): Hours	Activities	Hours
Study and Exam Proparation AUTONOMA Combination of methods	Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Unit 10 (de 19):	Laboratory practice or sessions [PRESENCIAL][Combination of methods]	7.56
Activities Hours	Study and Exam Preparation [AUTÓNOMA][Combination of methods]	4.5
Class Altendrance (theory) [PRESENCIAL][Lectures] 2 82 Study and Exam Preparation (AUTÓNOMA][Combination of methods] Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1 25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 1 2 (de 19): Western (Autónome (theory) [PRESENCIAL][Lectures] 8.27 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 8.27 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4.74 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4.74 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.9 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 3.3 Unit 1 3 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 3.3 Unit 1 3 (de 19)	Unit 10 (de 19):	
Study and Exam Preparation (AUTONOMA) (Combination of methods) 5	Activities	Hours
Study and Exam Preparation (AUTONOMA) (Combination of methods) 5	Class Attendance (theory) [PRESENCIAL][Lectures]	2.82
Mours Class Altendance (theory) [PRESENCIAL Lectures] 1.25	· · · · · · · · · · · · · · · · · · ·	
Activities		-
Class Allendance (theory) [PRESENCIAL][Lectures] 4 Situdy and Exam Preparation [AUTÖNOMA][Combination of methods] Hours Activities 1.25 Class Allendance (theory) [PRESENCIAL][Lectures] 8.27 Situdy and Exam Preparation [AUTÖNOMA][Combination of methods] Work Class Allendance (theory) [PRESENCIAL][Lectures] 2.82 Class Allendance (theory) [PRESENCIAL][Lectures] 4.74 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.74 Unit 14 (de 19): 2.82 Class Allendance (theory) [PRESENCIAL][Lectures] 4.9 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.9 Unit 15 (de 19): Vortical (Lectures) Class Allendance (theory) [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 7.56 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.2 Laboratory practice or sessions [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.2 Laboratory [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 1.25		Houre
Study and Exam Proparation [AUTÓNOMA] [Combination of methods] Hours		
Unit 12 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 8.27 Unit 13 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Proparation [AUTÓNOMA][Combination of methods] 4.74 Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.9 Unit 15 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 7.56 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 3.9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): <td></td> <td></td>		
Activities Hours Class Altendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTONOMA][Combination of methods] 8.27 Unit 13 (de 19): ————————————————————————————————————		4
Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTONOMA][Combination of methods] 3.27 Minit 13 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4.74 Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4.9 Unit 15 (de 19): **** Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Lectures] 3.9 Lubrit 16 (de 19): **** Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4.2 Unit 17 (de 19): *** Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTONOMA][Combination of methods] 4 Unit 13 (de 19): ***	, ,	
Study and Exam Preparation [AUTÓNOMA][Combination of methods] 8.27		
Unit 13 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.74 Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.9 Unit 15 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Class Attendance (theory) [PRESENCIAL][Lectures] 3.9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 3.9 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUT	Class Attendance (theory) [PRESENCIAL][Lectures]	
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2,82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4,74 Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2,82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4,9 Unit 15 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Class Attendance (theory) [PRESENCIAL][Lectures] 3,9 Study and Exam Preparation [AUTONOMA][Combination of methods] 3,9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2,82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4,2 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Study and Exam Preparation [AUTONOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Study and Exam Preparation [AUTONOMA][Combination of methods] 4 Unit 19 (de 19): Hours Class Attendance (theory) [PRESENCIAL]	Study and Exam Preparation [AUTONOMA][Combination of methods]	8.27
Class Altendance (theory) [PRESENCIAL][Lectures] 4.74 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.74 Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4.9 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.9 Unit 15 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 7.56 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 3.9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4.2 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4.2 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÖNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25	Unit 13 (de 19):	
Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.74	Activities	Hours
Unit 14 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTONOMA][Combination of methods] 4.9 Unit 15 (de 19): ************************************	Class Attendance (theory) [PRESENCIAL][Lectures]	2.82
Activities	Study and Exam Preparation [AUTÓNOMA][Combination of methods]	4.74
Class Attendance (theory) [PRESENCIAL][Lectures] 4.9 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.9 Unit 15 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 3.9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): *** Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): *** Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): *** Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation	Unit 14 (de 19):	
Study and Exam Preparation [AUTÓNOMÁ][Combination of methods] 4.9	Activities	Hours
Study and Exam Preparation [AUTÓNOMÁ][Combination of methods] 4.9	Class Attendance (theory) [PRESENCIAL][Lectures]	2.82
Unit 15 (de 19): Hours Cativities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 7,56 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 3,9 Unit 16 (de 19): War Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2,82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4,42 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1,25 Study and		
Activities Hours Class Attendance (theory) [PRESENCIAL][Combination of methods] 1.25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 3.9 Unit 16 (de 19): Work Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.437 Global activity hours Laboratory practice or sessions [PRESENCIAL][Lectures]<		
Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Laboratory practice or sessions [PRESENCIAL][Combination of methods] 3.9 Unit 16 (de 19): **** *******************************		Hours
Laboratory practice or sessions [PRESENCIAL][Combination of methods] 7.56 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 3.9 Unit 16 (de 19): Weak to the form of the foliation of methods] Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Metivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] Lecturities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] <td< td=""><td></td><td></td></td<>		
Study and Exam Preparation [AUTÓNOMA][Combination of methods] 3.9 Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Global activity Activities hours Class Attendance (theory) [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 2.43 Gloup tutoring sessions [PRESENCIAL][Combination of methods] 2.43		
Unit 16 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Lectivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Lectivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Lectivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Lectivities Hours Class Attendance (theory) [PRESENCIAL][Cectures] 1.25 Lectivities Hours Class Attendance (theory) [PRESENCIAL][Combination of methods] 1.25 Lectivities Hours Class Attendance (theory) [PRESENCIAL][Combination of methods] 1.5.12 Lectivities Hours Activities In	- · · · · · · · · · · · · · · · · · · ·	
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): ***********************************		5.9
Class Attendance (theory) [PRESENCIAL][Lectures] 2.82 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4.42 Unit 17 (de 19): Motivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Motivities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] Hours Class Attendance (theory) [PRESENCIAL][Lectures] Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Class Attendance (theory) [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 2.43		
Study and Exam Preparation [AUTÓNOMA][Combination of methods]		
Unit 17 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 2.997 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Class Attendance (theory) [PRESENCIAL][Combination of methods] 1.5.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 2.9.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		4.42
Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 18 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1.25 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Unit 17 (de 19):	
Study and Exam Preparation [AUTÓNOMA][Combination of methods] Activities Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Class Attendance (theory) [PRESENCIAL][Lectures] Activities Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] 1,25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities Ac	Activities	Hours
Unit 18 (de 19): Hours Activities 1.25 Class Attendance (theory) [PRESENCIAL][Lectures] 4 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Class Attendance (theory) [PRESENCIAL][Lectures]	1.25
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Study and Exam Preparation [AUTÓNOMA][Combination of methods]	4
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Unit 18 (de 19):	
Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 4 Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Activities	Hours
Study and Exam Preparation [AUTÓNOMA][Combination of methods] Unit 19 (de 19): Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Combination of methods] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		
Unit 19 (de 19): Hours Activities 1.25 Class Attendance (theory) [PRESENCIAL][Lectures] 1.4.37 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		
Activities Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		·
Class Attendance (theory) [PRESENCIAL][Lectures] 1.25 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 14.37 Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	` '	Ношко
Study and Exam Preparation [AUTÓNOMA][Combination of methods] Global activity Activities Laboratory practice or sessions [PRESENCIAL][Combination of methods] Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] Workshops or seminars [PRESENCIAL][Combination of methods] Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		
Global activity Activities hours Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		
Activities Laboratory practice or sessions [PRESENCIAL][Combination of methods] Class Attendance (theory) [PRESENCIAL][Lectures] Study and Exam Preparation [AUTÓNOMA][Combination of methods] Workshops or seminars [PRESENCIAL][Combination of methods] Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42		14.37
Laboratory practice or sessions [PRESENCIAL][Combination of methods] 15.12 Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	•	
Class Attendance (theory) [PRESENCIAL][Lectures] 29.97 Study and Exam Preparation [AUTÓNOMA][Combination of methods] 102.06 Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Activities	
Study and Exam Preparation [AUTÓNOMA][Combination of methods]102.06Workshops or seminars [PRESENCIAL][Combination of methods]2.43Group tutoring sessions [PRESENCIAL][Combination of methods]12.42	Laboratory practice or sessions [PRESENCIAL][Combination of methods]	15.12
Workshops or seminars [PRESENCIAL][Combination of methods] 2.43 Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Class Attendance (theory) [PRESENCIAL][Lectures]	29.97
Group tutoring sessions [PRESENCIAL][Combination of methods] 12.42	Study and Exam Preparation [AUTÓNOMA][Combination of methods]	102.06
	Workshops or seminars [PRESENCIAL][Combination of methods]	2.43
Total horas: 162	Group tutoring sessions [PRESENCIAL][Combination of methods]	12.42
		Total horas: 162

10. Bibliography and Sources								
Author(s)	Title/Link	Publishing house City ISBN Year Description						
J.A. Griffiths	Genética	MacGraw- Hill/Interamericana Madrid 0-7167-2285-2 2008 de España, S.A.						

W.S. Klug, M.R. Cummings, C.A. Spencer	Conceptos de Genética	Pearson Education	Madrid	84-8322-042-3	2008
CN de Protección de la Naturaleza	Estrategia española para la conservación y el uso sostenible de los Recursos Genéticos Forestales	MIMAM	Madrid	311-07-040-0	2006
J.I. Cubero	Introducción a la Mejora Genética Vegetal	Mundi-Prensa	Madrid	84-7114-812-9	1999
Jeffery Burley (ed.)	Encyclopedia of Forest Sciences	Elsevier	Amsterdam	9780121451608	2004
Robert H. Tamarin	Principios de Genética	Reverté	Barcelona	978-84-291-1850-6	1996