UNIVERSIDAD DE CASTILLA - LA MANCHA

GUÍA DOCENTE

1. General information

Course:	SEMINAR IN MATHEMATICAL BIOLOGY WITH APPLICATIONS IN BIOTECHNOLOGY	**Code:**	310937
Type:	ELECTIVE	**ECTS credits:**	6
Degree:	2351 - MASTER DEGREE PROGRAMME IN PHYSICS AND MATHEMATICS-FISYMAT	**Academic year:**	2020-21
Center:		**Group(s):**	20
Year:	1	**Duration:**	C2
Main language:	Spanish	**Second language:**	English
Use of additional languages:		**English Friendly:**	Y
Web site:		**Bilingual:**	N

Lecturer: **HELIA DA CONCEICAO PEREIRA SERRANO** - Group(s): **20**

Building/Office	Department	Phone number	Email	Office hours
Margarita Salas/Despacho 327	MATEMÁTICAS	926052237	heliac.pereira@uclm.es	Send an email to make an appointment.

2. Pre-Requisites

It is necessary to know about mathematical analysis as well as ordinary and partial differential equations.

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

Not established

4. Degree competences achieved in this course

Course competences

Code	Description
CE02	Develop the ability to decide the appropriate techniques to solve a specific problem with special emphasis on those problems associated with the Modeling in Science and Engineering, Astrophysics, Physics, and Mathematics
CE03	Have the ability to build and develop advanced mathematical reasoning, and delve into the different fields of mathematics
CE04	Have the ability to build and develop advanced physical reasoning, and delve into the various fields of physics and astrophysics
CE05	Know how to obtain and interpret physical and/or mathematical data that can be applied in other branches of knowledge
CE06	Prove the necessary capacity to perform a critical analysis, evaluation and synthesis of new and complex results and ideas in the field of astrophysics, physics, mathematics and biomathematics
CE07	Ability to understand and apply advanced knowledge of mathematics and numerical or computational methods to problems of biology, physics and astrophysics, as well as to build and develop mathematical models in science, biology and engineering
CE08	Ability to model, interpret and predict from experimental observations and numerical data

5. Objectives or Learning Outcomes

Course learning outcomes

Description

6. Units / Contents

Unit 1: BIOMAT course

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	CE02 CE03	1.04	26	Y	Y	
Class Attendance (practical) [ON-SITE]	Workshops and Seminars	CE04 CE05	0.4	10	Y	Y	
Project or Topic Presentations [ON-SITE]	Individual presentation of projects and reports	CE07 CE08	0.24	6	Y	Y	
Individual tutoring sessions [ON-SITE]	Guided or supervised work	CE02 CE03 CE04 CE05 CE06 CE07 CE08	0.32	8	Y	N	
Study and Exam Preparation [OFF-SITE]	Self-study	CE02 CE03 CE04 CE05 CE06 CE07 CE08	4	100	N	-	
		Total:	**6**	**150**			
		Total credits of in-class work: 2					**Total class time hours: 50**

Total credits of out of class work: 4	Total hours of out of class work: 100

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
Assessment of active participation	40.00%	40.00%	Assessment of student attendance and participation in class and in seminars.
Portfolio assessment	60.00%	60.00%	Realization of reports, works and/or projects made individually or in groups.
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**

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
No se ha introducido ningún elemento bibliográfico						