GUÍA DOCENTE ABREVIADA DE LA ASIGNATURA

G1776 - Astronomy

Doble Grado en Física y Matemáticas
Grado en Física

Curso Académico 2018-2019

1. DATOS IDENTIFICATIVOS				
Título/s	Doble Grado en Física y Matemáticas Grado en Física		Tipología y Curso	Obligatoria. Curso 4 Obligatoria. Curso 3
Centro	Facultad de Ciencias			
Módulo / materia	MATERIA MECÁNICA CLÁSICA Y ASTRONOMÍA MÓDULO CENTRAL			
Código y denominación	G1776 - Astronomy			
Créditos ECTS	6	Cuatrimestre	Cuatrimestral (2)	
Web				
Idioma de impartición	Inglés		Forma de impartición	Presencial

Departamento	DPTO. FISICA MODERNA
Profesor responsable	FRANCISCO JESUS CARRERA TROYANO
E-mail	francisco.carrera@unican.es
Número despacho	IFCA - Edificio Juan Jordá. Planta: + 1. DESPACHO (107)
Otros profesores	SILVIA MATEOS IBAÑEZ AMALIA CORRAL RAMOS

3.1 RESULTADOS DE APRENDIZAJE
- Acquire an overall view of the Universe: scale of the various structures, position of the Earth
- Know the role of the different forces acting on the Universe and their range of application
- Understand the life cycle of the stars
- Understand Astrophysical phenomena
- Understand the role of General Relativity in studying the Universe
- Know the evidence for the Big Bang
- Understand the complementarity of observations performed with different detectors at different wavelengths
- Analyse new phenomena through indirect evidence

4. OBJETIVOS
Application of their previous knowledge of Physics on an astronomical context
Realisation of the main physical processes happening in astronomical objects
Application of simple physical approximations to understand the basic behaviour of those objects
Experience in the process of gathering astronomical data
Analysis of real and simulated astronomical data, to extract physical information from them
Critical evaluation of the correctness of the results of the calculations performed, through the analysis of orders of magnitude and the development of physical intuition
Obtaining information on astronomical topics: analysing and summarising it critically
Present publicly and discuss the results of a task

6. ORGANIZACIÓN DOCENTE	
CONTENIDOS	
1	Introduction: main concepts and history
2	Physical processes in Astronomy
3	Positional Astronomy
4	Observables and instrumentation in Astronomy
5	The Solar System and the Sun
6	Stars
7	Galaxies and Active Galaxies
8	Large Scale Structure and Cosmology
9	Life in the Universe

7. MÉTODOS DE LA EVALUACIÓN				
Descripción	Tipología	Eval. Final	Recuper.	%
Preparation, development and results of each lab./observational session	Evaluación en laboratorio	No	No	40,00
Written reports of each lab./observational session	Trabajo	No	Sí	30,00
Public presentation of selected lab./observational reports	Otros	No	Sí	30,00
TOTAL				100,00
Observaciones				
The written reports will be checked for plagiarism, following the University rules for such cases if it is found.				
Criterios de evaluación para estudiantes a tiempo parcial				
The schedule and timetables of the laboratory sessions will be as flexible as possible, as well as the deadlines for the presentations of the written reports.				

8. BIBLIOGRAFÍA Y MATERIALES DIDÁCTICOS
BÁSICA
"Astronomy Today" E. Chaisson, S. McMillan, 2002, Prentice Hall

Esta es la Guía Docente abreviada de la asignatura. Tienes también publicada en la Web la información más detallada de la asignatura en la Guía Docente Completa.