

**COURSE DATA****Data Subject**

<b>Code</b>	43983
<b>Name</b>	Methodological tools in mathematical research
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	3.0
<b>Academic year</b>	2018 - 2019

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>	<b>year</b>
2183 - Master's Degree in Mathematical Research	Faculty of Mathematics	1	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2183 - Master's Degree in Mathematical Research	3 - Methodological tools in mathematical research	Obligatory

**SUMMARY**

Writing and processing of scientific texts with LaTeX. Process of writing and publishing an article.

**PREVIOUS KNOWLEDGE****Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.

**Other requirements**

No se requieren conocimientos previos.

**COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)**



### 2183 - Master's Degree in Mathematical Research

- Students should demonstrate self-directed learning skills for continued academic growth.
- Saber escribir una memoria de un trabajo académico realizado.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Que los estudiantes sepan aplicar los conocimientos y habilidades adquiridas planificando el tiempo y los recursos disponibles.
- Que los estudiantes sean capaces de acceder a las bases de datos bibliográficas especializadas utilizando las nuevas tecnologías.
- Que los estudiantes sepan recopilar la información necesaria para abordar un problema y sintetizarla.
- Saber buscar información bibliográfica matemática.
- Que los estudiantes sean capaces de comprender de manera autónoma artículos de investigación o innovación en alguna de las áreas de las Matemáticas.
- Que los estudiantes sean capaces de sintetizar el contenido de seminarios y coloquios sobre temas de alguna de las áreas en Matemáticas.
- Que los estudiantes sepan elegir y utilizar herramientas informáticas adecuadas para abordar problemas relacionados con las Matemáticas y sus aplicaciones.
- Que los estudiantes sean capaces de diseñar, desarrollar e implementar programas informáticos eficientes para abordar problemas relacionados con las Matemáticas y sus aplicaciones.

**LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)**

**English version is not available**

### DESCRIPTION OF CONTENTS

#### 1. The LaTeX system

Installation and Introduction to LaTeX system

Document types and structures thereof

Mathematical formulas

BibTeX bibliographies

Presentations with LaTeX

**2. Writing a paper**

The dawn of a scientific paper  
Process of publishing an article  
Reporting a pre-publication  
papers and book reviews  
Presentations at conferences

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
<b>TOTAL</b>	<b>30,00</b>	

**TEACHING METHODOLOGY**

**English version is not available**

**EVALUATION**

Student assessment will be continuous and will be based on attendance, participation in it, questions in class and delivery and exhibition of works. In cases where justified for reasons students can not attend all the classes other alternative evaluation system will remember.

For students who are granted the exemption to attend class by the UPV, they will be assessed on-line, having to present the same work as the rest of the students. The exhibition of them will take place on Skype.

**REFERENCES****Basic**

- El libro de Latex (Bernardo Cascales y otros)
- The Latex companion (Frank Mittelbach)
- Writing mathematics well : A manual for authors (Leonard Gillman)
- Mathematical writing (Donald E. Knuth)
- Handbook of writing for the mathematical sciences (Nicholas J. Higham)