

SUBJECT TEACHING GUIDE

336 - Functional Analysis

Master's Degree in Mathematics and Computing

Academic year 2023-2024

| 1. IDENTIFYING DAT | 'A | | | | | | |
|----------------------------------|--|------------------|----|--------------------|---------------|------------------|--|
| Degree | Master's Degree in Mathematics and Computing | | | | Type and Year | Optional. Year 1 | |
| Faculty | Faculty of Sciences | | | | | | |
| Discipline | | | | | | | |
| Course unit title and code | 336 - Functional Analysis | | | | | | |
| Number of ECTS credits allocated | 3 | Term | | Semester based (2) | | | |
| Web | | | | | | | |
| Language of instruction | Spanish | English Friendly | No | Mode of o | delivery | Face-to-face | |
| | | | | | | | |

| Department | DPTO. MATEMATICAS, ESTADISTICA Y COMPUTACION | | | |
|------------------|---|--|--|--|
| Name of lecturer | MANUEL GONZALEZ ORTIZ | | | |
| | | | | |
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| Office | Facultad de Ciencias. Planta: + 0. DESPACHO PROFESORES (0053) | | | |
| Other lecturers | | | | |

3.1 LEARNING OUTCOMES

- Introduction to research in functional analysis.

4. OBJECTIVES

Introduction to the study of isomorphic properties of Banach spaces.



6. COURSE ORGANIZATION

CONTENTS

Bases and basic sequences in Banach spaces. Special types of bases. Application: some isomorphic properties of C[0,1], L_p, I_p and c_0.

| 7. ASSESSMENT METHODS AND CRITERIA | | | | | | | | |
|---|--------------|-------------|-----------|-------|--|--|--|--|
| Description | Туре | Final Eval. | Reassessn | % | | | | |
| A written exam. | Written exam | No | Yes | 50,00 | | | | |
| A written presentation. | Work | No | Yes | 50,00 | | | | |
| TOTAL 100,00 | | | | | | | | |
| Observations | | | | | | | | |
| Observations for part-time students | | | | | | | | |
| Partial time students may choose to take only the final exam. | | | | | | | | |

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

F. Albiac and N.J. Kalton. Topics in Banach space theory. Springer 2006.