Course Description Form

1. Course Name:
Functional Analysis 2
2. Course Code:
3. Semester / Year:
Second semester 2024−2025
4. Description Preparation Date:
9/10/2024
5. Available Attendance Forms:
Traditional attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Rifaat Saad Abduljabbar Email: drrifaat1974@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• **Introducing the student to mathematical conce related to functional analysis.** • **Training the student to deal with abstr mathematical concepts.**

9. Teaching and Learning Strategies

Strategy	Traditional and e-lectures

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3		**Riesz's Lemma.**	Presenting lecture	Daily a monthly tests
2	3		**Riesz's Lemma.**	Presenting lecture	Daily a monthly tests

3	3		Linear operators	Presenting lecture	Daily a monthly tests
4	3		**Bounded a Continuous Lin Operators**	Presenting lecture	Daily a monthly tests
5	3		**Linear Functionals**	Presenting lecture	Daily a monthly tests
6	3		**Linear Operators a Functionals on Fi Dimensional spaces**	Presenting lecture	Daily a monthly tests
7	3		**Linear Operators a Functionals on Fi Dimensional spaces**	Presenting lecture	Daily a monthly tests
8	3		**Normed Spaces Operators.**	Presenting lecture	Daily a monthly tests
9	3		**Dual Space**	Presenting lecture	Daily a monthly tests
10	3		**Inner Product Space**	Presenting lecture	Daily a monthly tests
11	3		**Hilbert Space**	Presenting lecture	Daily a monthly tests
12	3		**Further Properties Inner Product Spaces**	Presenting lecture	Daily a monthly tests
13	3		**Orthogonal Complements a Direct Sums**	Presenting lecture	Daily a monthly tests
14	3		**Orthonormal Sets a Sequences**	Presenting lecture	Daily a monthly tests
15	3		**Series Related Orthonormal Sequen and Sets**	Presenting lecture	Daily a monthly tests

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Introduction to functional analy - Krayzic
Main references (sources)	
Recommended books and references	

(scientific journals, reports…)	
Electronic References, Websites	