Course Description Form

1. Course Name:

Optic2

2. Course Code:

PHY-311

3. Semester / Year:

First / 2024-2025

4. Description Preparation Date:

1/2/2025

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

3/3

7. Course administrator's name (mention all, if more than one name)

Name: Dr. Khalil T Hassan
Email: sc.khalil_alftyan@uoanbar.edu.iq

8. Course Objectives

Course Objectives	Through this study, we expect that the student will be able to learn about the basics optics and its applications, and simulate different optical properties through different computer programs in order to get a feel for the topics presented theoretically, throug • Recognize visual terms • Learn about applications of optics. • Learn how to disassemble telescopes and microscopes

9. Teaching and Learning Strategies

Strategy	Conducting a mixed of three common learning stratiges Learning Competitive Learning Individualistic –3 Cooperative learning

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3		The first chapter (basic concepts in geometric optics		

2	3		Chapter Two (Lenses)		
3	3		Thin lenses		
4	3		Lens rules.		
5	3		Chapter Three (Zoom in and Zoom out).		
6	3		The real image and the imaginary image.		
7	3		How to plan to draw a pictu		
8	1		1 month exam		
9	3		Chapter Four (thick lenses).		
10	3		Optical fiber Mirrors.		
11	3		Chapter Five (Diffraction an its applications).		
12	3		Chapter Six (Interference).		
13	3		Chapter Seven (Scattering)		
14	3		2 month exam		
15	3		The preparatory week bef the final exam		

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

Daily exams 5% Reports 10% Monthly exams 35% Final exam 50%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	-Optics and photonics an introduction by F. Graham Smith, Terry A. King, Dan Wilkins (z-lib.org) -Optics-hecht-4th-ed-2003

Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	