***College:***

***Department:***

***Stage: 1st.***

***Republic of Iraq***

***Ministry of Higher Education and scientific research***

***University of Baghdad***

***Quality Assurance and Academic***

***Performance Department***

**Course Syllabus**

**Name of the First Teacher of the Course: Dr. Abeer I. Alwared**

**Accademic Rank: Assistance professor**

**Degree:Ph.D.**

**E-mail: abeerwared@yahoo.com**

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| --- | --- | --- | --- | --- | --- |
| Environmental Physics | | | | | **Course Title** |
| **Annual** | | **Semester System**  √ | | | **Academic System** |
| Teaching the basic principles of environmental physics. | | | | | **Course Objectives** |
| “Introduction to Environmental Physics: Planet Earth, Life andClimate”, Mason N. and Hughes P., Taylor and Francis, 2001. | | | | | **Textbooks** |
| “Exercises in Environmental Physics“,Faraoni V., Springer Science & Business Media, LLC,2006. | | | | | **Reference Books** |
| **End Semester Examination** | **Project** | **Quizzes** | **Laboratory work** | **Theoretical Content Exam** | **Course Assessment for Semester System**  **(100%)** |
| **50%** | **-** | **10%** | **20%** | **20%** |

**Weekly Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Notes** | **Laboratory Work** | **Theoretical Content** | **week** |
|  | Definition for Lab. | Introduction to environmental physics/The human environment | **1** |
|  | Experiments with a spiral spring | Energy transfers | **2** |
|  | Ohm’s law | Structure and composition of the atmosphere | **3** |
|  | Forces equilibrium | Electromagnetic radiation and radioactivity | **4** |
|  | The radius of gyration of a cylinder | Electromagnetic radiation and radioactivity | **5** |
|  | The prism and evaluate the prism A pex Angle A and minimum deviation angle, refractive index of prism. | The greenhouse model | **6** |
|  | Focal length of convex lens | The hydrosphere | **7** |
|  | Diffraction from a single slit. | Wind in the atmosphere | **8** |
|  | Moment of inertia for flywheel | Physics of ground | **9** |
|  | Simple pendulum | Energy and the environment | **10** |
|  | Determination of unknown resistance using a Wheatstone bridge | Renewable resources | **11** |
|  | The speed of sound by means of resonance tube closed at one end | Noise pollution | **12** |
|  | Glass refractive index | Optics and light | **13** |
|  | Diffraction grating | Thermal pollution | **14** |
|  | Exam. | Thermal pollution | **15** |
|  |  | Exam. | **16** |