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| *Course report of* |
| **Electricity and Magnetism–PHM022s– Fall 2019** |
| University: Ain Shams | Faculty: Engineering |

## Basic Information

1. Title and code:

|  |
| --- |
| **Electricity and Magnetism –PHM022s** |

1. Program on which the course is given:

|  |  |
| --- | --- |
|

|  |
| --- |
| All Programs |

 |

1. Year/Level of program:

|  |
| --- |
| FreshmanLevel |

1. Units/Credit Hours PHM022

|  |  |
| --- | --- |
| ( i ) Lecture : | 3 |

|  |  |
| --- | --- |
| ( ii ) Tutorial/Practical : | 1+1 |

|  |  |
| --- | --- |
| ( iii ) Total : | 5 |

1. Names of lecturers contributing to delivery of the course:

|  |  |
| --- | --- |
| i - | Dr. Salwa Mohsen Ali ElTaweel |

|  |  |
| --- | --- |
| Course coordinator: | Dr. Salwa Mohsen Ali ElTaweel |

|  |  |
| --- | --- |
| External evaluator: | --- --- --- |

## Statistical Information

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **A+** | **A** | **A-** | **B+** | **B** | **B-** | **C+** | **C** | **C-** | **D+** | **D** | **F** | **Total** |
| **No. of students** | 0 | 1 | 0 | 0 | 3 | 5 | 5 | 6 | 6 | 6 | 25 | 68 | 125 |
| **% of students** | 0 | 0.8 | 0 | 0 | 2.4 | 4 | 4 | 4.8 | 4.8 | 4.8 | 20 | 54.4 | 100 |

The number of F grades includes both failed and absent students, absent students are 11 equal 8.8%

Results are lower than normal because more than 50% of the students enrolled in the course are either graduates of vocational schools or equivalent certificates to Thanwaya Amma from African and Arabic countries (with the greatest number vocational school graduates). They are so week in both English and Maths, both are essential for Physics understanding, they are also week in Physics and in problem solving strategies which affects their degrees greatly.

## Professional Information

1. **Course Teaching:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Content** | **Lec.****Hours** | **Tut.****Hours** | **Lab.****Hours** | **Instructors team (one doctor for each group)** |
| Introduction and Vectors  | 3 | 1 | 1 |  Dr. Salwa Mohsen Ali ElTaweel |
| Electric force & Electric field  | 3 | 1 | 1 |
| Electric Flux | 3 | 1 | 1 |
| Gauss’s Law | 3 | 1 | 1 |
| Applications of Gauss’s Law | 3 | 1 | 1 |
| Electric potential | 3 | 1 | 1 |
| Capacitors and dielectrics. | 3 | 1 | 1 |
| Current, Resistance and RC Circuits | 3 | 1 | 1 |
| Magnetic force. | 3 | 1 | 1 |
| Biot-Savart Law | 3 | 1 | 1 |
| Ampere’s Law | 3 | 1 | 1 |
| Faraday-Lenz law | 3 | 1 | 1 |
| Self and Mutual Inductance | 3 | 1 | 1 |
| Magnetic materials and Magnetic Circuits | 3 | 1 | 1 |
| AC circuits | 3 | 1 | 1 |

**Topics taught as a percentage of the content specified:**

 **>90 % X 70-90 % <70%**

**Reasons in detail for not teaching any topic**

**Teaching and learning methods:**

 Lectures: **X**

Assignments:

Labs **X**

Technical Reports:

Class Activity: **(Tutorials) X**

**Case Study:**

Other assignments/homework: **NA**

I have asked the students to prepare a one to two pages on selective topics as a mini research for this course that contributes 3% to the final grade.

1. **Student assessment:**

|  |  |
| --- | --- |
| **Method of assessment** | **Percentage of total** |
| Written examinations(final+midterm) | 75 % |
| Oral examination (Project presentation) | 0 % |
| Practical/laboratory work | 15 % |
| Other assignments/class work | 10 % |

**Members of examination committee**

DR. Wael Fikry, Dr. Salwa Mohsen Ali El Taweel, Dr. Samy Abdelrahman, Dr. Elmozammel

**Role of external evaluator**

N/A………………………………………………………………………………………….

1. **Facilities and teaching materials:**

x

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

1. **Administrative constraints:**

List any difficulties encountered

 No difficulties

1. **Comments from external evaluator(s): Response of course team**

………**N/A** ………………. …………………………….