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| *Course report of* | |
| **Basic Mathematics – PHM 011**  Spring 2019 - Bylaw 2018 | |
| University: Ain Shams | Faculty: Engineering |

## Basic Information

1. Title and code :

|  |
| --- |
| **Basic Mathematics – PHM 011** |

1. Program on which the course is given :

|  |  |
| --- | --- |
| |  | | --- | | All programs | |

1. Year/Level of programs :

|  |
| --- |
| Level 0 |

1. Units/Credit Hours

|  |  |
| --- | --- |
| ( i ) Lecture : | 0 |

|  |  |
| --- | --- |
| ( ii ) Tutorial/Practical : | 2 |

|  |  |
| --- | --- |
| ( iii ) Total : | 2 |

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

|  |  |
| --- | --- |
| i - | Dr. Ashraf KHATTAB |

|  |  |
| --- | --- |
| ii - |  |

|  |  |
| --- | --- |
| iii - |  |

|  |  |
| --- | --- |
| Course coordinator: | Dr. Ashraf KHATTAB |

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

## Statistical Information

|  |  |
| --- | --- |
| No. of students attending the course: | 11 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | F | SUM |
| Students No. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 5 | 11 |
| Percentage (%) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 45.5 | 45.5 |  |

## Comment on the statistics:

The reason of the high number of D and F is as follows: There was 11 students in this course. All of them studied this course, Basic Mathematics, in Fall 2019 and they got F so they had to redo the course in the last semester Spring 2019. One of them is caught cheating from his mobile in the final exam so he got F, and the other 4 didn't got 30% in the final exam. The 5 students who got D, has problems in the final exam. According to my opinion, these students has problems in the fundamentals of mathematics, which they learned in the preparatory and secondary schools.

## Professional Information

**1- Course teaching**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Course Content (Part I)** | **Lecturer** | **Hours** |
| 1 | Review of definition of a function. | **Dr. Ashraf Khattab** | **2** |
| 2 | Derivatives and techniques of differentiation | **Dr. Ashraf Khattab** | **2** |
| 3 | Chain rule, implicit and parametric differentiation. | **Dr. Ashraf Khattab** | **2** |
| 4 | Local maximum, local minimum and inflection points of a function. | **Dr. Ashraf Khattab** | **2** |
| 5 | Asymptotic lines and curve sketching of a function. | **Dr. Ashraf Khattab** | **2** |
| 6 | Indefinite integrals and change of variables. | **Dr. Ashraf Khattab** | **2** |
| 7 | Integration techniques by substitution and trigonometric functions. | **Dr. Ashraf Khattab** | **2** |
| 8 | Definite integral and its properties. | **Dr. Ashraf Khattab** | **2** |
| 9 | Applications of definite integral to area, volumes, arc length and surface area. | **Dr. Ashraf Khattab** | **2** |
| 10 | Definition of exponential and logarithmic functions. | **Dr. Ashraf Khattab** | **2** |
| 11 | Differentiation and integration of exponential and logarithmic functions. | **Dr. Ashraf Khattab** | **2** |
| 12 | Matrices and matrix algebra | **Dr. Ashraf Khattab** | **2** |
| 13 | The determinants and Cramer's rule. | **Dr. Ashraf Khattab** | **2** |
| 14 | The inverse of a matrix and its applications. | **Dr. Ashraf Khattab** | **2** |
| 15 | General Revision | **Dr. Ashraf Khattab** | **2** |
| Total Number of Hours | | **0** | **30** |

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

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

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

All topics were taught ……………………………………….

………………………………………………………………………………………………

…………………………………………………………………………………………………

**If any topics were taught which are not specified, give reasons in detail**

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

………………………………………………………………………………………………

**Teaching and learning methods:**

Lectures: **X**

Practical training/ laboratory:

Seminar/Workshop:

Class Activity: **(Tutorials) X**

**Case Study:**

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons:

……………………………………………………………………………………………………

1. **Student assessment:**

|  |  |
| --- | --- |
| **Assessment method** | **Percentage of total** |
| Written examination (final+Midterm) | 85% |
| Oral examination (Project presentation ) | **0%** |
| Practical / Laboratory Work | 0% |
| Other assignments/ class work | 15% |

**Members of examination committee**

i - Dr. Ashraf Khattab

**Role of external evaluator**

N/A…………………………………………

1. **Facilities and teaching materials:**

Totally adequate

Adequate to some extent **X**

Inadequate

List any inadequacies

1. **Administrative constraints:**

List any difficulties encountered

No difficulties

1. **Student evaluation of the course:**

**Gerneral Information**: **Course PHM\_\_011:Basic Mathematics**

**Instructor**: **Dr. Ashraf Khattab Hassan Khattab**

Course Evaluation (1 Participants)

I explored parts of the subject on my own. 50%

I was able to learn by trying out my own ideas. 75%

The course was challenging in a stimulating way. 50%

The atmosphere on the course was open and inclusive. 75%

The intended learning outcomes helped me understand what I was expected to achieve. 75%

I understood how the course was organized and what I was expected to do. 75%

I was able to learn from concrete examples that I could relate to. 50%

Understanding of key concepts had high priority. 75%

The course activities helped me to achieve the intended learning outcomes efficiently. 75%

I was able to practice and receive feedback without being graded. 75%

My background knowledge was sufficient to follow the course.100%

I was able to learn by collaborating and discussing with others.75%

I was able to get support if I needed it. 100%

The instructor lecturing helped me to understand the course contents. 75%

The instructor encouraged active participation and discussion. 75%

The instructor explained all course contents. 75%

The lectures was started and ended exactly at the scheduled times. 75%

**Response of Course Team**

List any criticisms

…No criticism.…….………..……………………………….

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

………**N/A** ………………. ………