**Course Report for- Semester-Fall 2019**

**MEP 231: FLUID Dynamics**

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| Ain Shams University  Faculty of Engineering  Department of Mechanical Power Engineering | AIN |

#### **Course Report**

**A- Basic Information**

**1. Title and code: FLUID Dynamics, MEP231**

**2. Programmer(s) on which this course is given:**

**Mechanical Engineering (Power. Mechatronics and**

**Automotive departments)**

**3. Year/ Level of programmer: Third Year**

**Hours:** Lectures **4** Tutorial  **2** Total **6**

**4-Names of lecturers contributing to the delivery of the course**

**Prof. Dr. Mohamed A El-Samanoudy .**

**5-**.Course co-coordinator: Prof. Dr. Mohamed A El-Samanoudy

External evaluator N/A ……………………………

**B-1- Statistical Information**

No. of students attending the course: No. 454 ( 100%)

No. of students completing the course: No: ( 100%)

**Results:**

Passed: No.% Failed: No.%

**Grading of successfulstudents:**

**B-2- Statistical Information**

|  |  |  |
| --- | --- | --- |
| **Grade** | **Number of Students** | **Percentage %** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **Total Number** |  |  |
| **Failed students** |  |  |

**C- Professional Information**

**1 – Course teaching**

|  |  |  |
| --- | --- | --- |
| **Topics actually taught** | **No. of hours(Total)** | **Lecturer** |
| 1-Fundamental Concepts, Fluid Properties an Definitions | 8 | Prof. Dr. Mohamed A El-Samanoudy |
| 2-Fluid Statics, Manometers, Forces on submerged bodies, and Rotating Fluids | 10 | Prof. Dr. Mohamed A El-Samanoudy |
| 3- Basic Equations of Fluid Mechanics. | 6 | Prof. Dr. Mohamed A El-Samanoudy |
| 4-Dimensional Analysis and Similitude | 4 | Prof. Dr. Mohamed A El-Samanoudy |
| 5-Flow in Closed Conduits. | 10 | Prof. Dr. Mohamed A El-Samanoudy |
| 6-Compressible Flow | 8 | Prof. Dr. Mohamed A El-Samanoudy |
| 7-Flow Over Immersed Bodies | 8 | Prof. Dr. Mohamed A El-Samanoudy |
| 8 -Inviscid flow - Navier Stokes Equations, Stream function , Continuity Equation And Velocity Potential | 4 |  |
| 9-Revision | 2 |  |
| Total | 60 |  |

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

**>90 % x 70-90 % <70%**

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

N/A………………………. ……………………..

**2- Teaching and learning methods:**

Lectures: X

Practical training/ laboratory: X

Seminar/Workshop:

Class Activity: X

## Case Study:

Other assignments/homework:

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

**3- Student assessment:**

**Method of assessment Marks**

Written examination 90 Marks = 60%

Oral Examination 30 Marks = 20%

Written Midterm examination 15 Marks = 10%

Assignments. 10MARKS

Practical/laboratory work 0 Marks

Attendance &class work 5 % 5 Marks

Total 150 Marks = (100 %)

**ILO’s table for final examination**

**Details**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Assessment | *a1* | *a2* | *a3* | *a4* | a5 | b1 | b2 | c1 | c2 | d1 | d2 |
| Final Exam(Questions 1) | *x* |  |  | *x* |  | x | x |  |  |  |  |
| Final Exam(Questions 2) | *x* | *x* | *x* |  |  | x | x |  |  |  |  |
| Final Exam(Questions 3) | *x* | *x* | *x* | *x* | x | x | x |  |  |  |  |
| Final Exam(Questions 4) | *x* |  |  |  | x | x | x |  |  |  |  |

Members of examination committee

**Prof. Dr. Mohamed A El-Samanoudy**

Role of external evaluator

N/A………………………………………

**- Facilities and teaching materials:**

Totally adequate

**5- Administrative constraints**

List any difficulties encountered

**None**…………………………..

**6- Student evaluation of the course:**

**Response of Course Team**

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As I expect The evaluation is quite good , Although some students could not appreciate the value of laboratory work ! They may have some case when they ask for some new and modern equipments. I agree with them.!

**7- Comments from external evaluator(s): Response of course team**

N/A……………………………. …………………………….

**8- Course enhancement:**

**Progress on actions identified in the previous year’s action plan:**

**Action State whether or not completed and give reasons for any non-completion**

N/A……………………………. …………………………….

**9- Action plan for academic year 2020– 2021 -----------**

**Actions required Completion date Person responsible**

**Course coordinator:** Prof. Dr. Mohamed A El-Samanoudy

**Signature:** Mohamed A El-Samanoudy**, Date:Jan,29-2020**