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**Department of Chemical Engineering**

**Cairo University**

**Faculty of Engineering**

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| **Annual Course Report** |
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| **Program(s) on which this course is given** | Chemical Engineering  |
| **Department offering the program** | Chemical Engineering |
| **Department offering the course** | Chemical Engineering |
| **Academic Level** | 2nd year  |
| **Date**  | 2013-2014 |
| **Semester(based on final exam timing)** |  Fall √ Spring |

 |
| **A - Basic Information** |
| **1. Title:** | Momentum Transfer  | **Code:** | CHE203A |
| **2. Units/Credit hours:** | Lectures  | 2 | Tutorial | 2 | Practical | 0 | Total | 4 |
| **3. Names of lecturers /TAs contributing to the delivery of the course:** | * Prof. Salwa Raafat
* Ass. Prof. Shakinaz El-Sherbeni
* Ass. Prof. Ahmed Fayez
* Eng. Fatma Ibrahim
* Eng. Mohamed Ismail
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| **4. Course coordinator:** | Prof. Salwa Raafat | **External evaluator:** |  |
| **B- Professional Information** |
| **1. Course Teaching:** |
| * **Topics actually taught**
 | **No. of hours** | **Lecture** | **Tutorial/Practical** | **Lecturer** |
| Basic Definitions & Fluid Properties  | 8 | 2 | 2 | Dr. Shakinaz El-Sherbeni |
| Pressure Variation  | 8 | 4 | 4 | Dr. Shakinaz El-Sherbeni |
| Forces on Submerged bodies | 8 | 4 | 4 | Dr. Shakinaz El-Sherbeni |
| Fluids in Relative Motion  | 8 | 4 | 4 | Dr. Shakinaz El-Sherbeni |
| Introduction to fluid kinematics | 4 | 2 | 2 | Dr. Ahmed Fayez |
| Governing equations to fluid kinematics | 20 | 10 | 10 | Dr. Ahmed Fayez |
| Flow Measurements  | 4 | 2 | 2 | Dr. Ahmed Fayez |
| * **Topics taught as a percentage of the content specified:**
 | √□>90% □70-90% □<70% |
| * **Reasons in detail for not teaching any topic: ------------**
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|  |
| * **If any topics were taught which are not specified, give reasons in detail:**No extra topics were tough other than specified topics
 |
|  |
| **2.Teaching and Learning Methods:** | Lectures (√ ) | Practical Training/ Laboratory() | Seminar/Workshop ( ) |
| Class Activity (√ ) | Case Study () | Projects ( √ ) |
| E-learning ( ) | Assignments /Homework () | Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **If teaching and learning methods were used other than those specified, list and give reasons:**No other learning methods  |
| **3. Student Assessment:** |
| * **Method of Assessment**
 | **Percentage of total**  |
| - Written examination |  |
| - Midterm examination (written) |  |
| - Practical/laboratory work | 0% |
| -Total  | 100% |
| * **Members of Examination Committee:**
 | * Prof. Salwa Raafat
* Ass. Prof. Ahmed Fayez
 |
| * **Role of external evaluator:**
 | Review program ILOs  |
| **4. Facilities and Teaching Materials**:  |  √□ Totally adequate □Adequate to some extent □ Inadequate |
| List any inadequacies: |

**5. Exams/ILOs Matrix**

* **ILOs/Evaluation Source Matrix**

|  |  |
| --- | --- |
|  | **Source of Evaluation** |
| **ILOs** | **Assignments** | **Quizzes** | **Experiments** | **Lab Exam** | **Midterm Exam** | **Projects** | **Term Papers/Reports** | **Final Exam** | **Others 1** | **Others 2** |
| 1. Concepts and theories of mathematics and sciences, appropriate to the discipline.
 |  | **√** |  |  |  |  |  |  |  |  |
| 1. Methodologies of solving engineering problems, data collection and interpretation
 |  |  |  |  |  | **√** |  |  |  |  |
| 1. Current engineering technologies as related to disciplines.
 |  |  |  |  |  | **√** |  |  |  |  |
| 1. The principles of chemical engineering including mass and energy balance.
 |  | **√** |  |  | **√** |  |  | **√** |  |  |
| 1. Think in a creative and innovative way in problem solving and design.
 |  | **√** |  |  | **√** | **√** |  | **√** |  |  |
| 1. Create and/or re-design a process, component or system, and carry out specialized engineering designs.
 |  |  |  |  |  | **√** |  |  |  |  |

* **Midterm Exam**

|  |  |
| --- | --- |
| **Question** | **ILOs** |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **1. (problem 1)** |  |  |  |  |  |  |  |  |  |  |
| **2. (problem 2)** |  |  |  |  |  |  |  |  |  |  |

* **Final Exam**

|  |  |
| --- | --- |
| **Question** | **ILOs** |
|  | **1** | **2** | **3** | **4** | **5** | **6** |
| **1. (problem 1)** |  |  |  |  |  |  |
| **2. (problem 2)** |  |  |  |  |  |  |
| **3. (problem 3)** |  |  |  |  |  |  |
| **4. (problem 4)** |  |  |  |  |  |  |
| **5. (problem 5)** |  |  |  |  |  |  |
| **6. (problem 6)** |  |  |  |  |  |  |

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| **6. Administrative Constraints:**  |
| List any difficulties encountered: the class hall were not equipped with a sound system  |

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| **C-Course Assessment** |
| **1- Statistical Information** |
| **a. No. of students attending the course:** |
| **b. No. of students completing the course:** |  |  |  |
| **c. Results:** | 3.a. Passed |  | % | 3.b. Failed |  | % |
| **d. Grading of successful students:** | 4.a. Excellent |  |  % | 4.b. Very Good |  |  % |
| 4.c. Good |  | % | 4.d. Pass |  | % |
| **Response of Course Team** **( if needed)** |  |
| **2. Student Evaluation of the Course:** |  |
| **ILO’s Exit survey report as attached** |  |
| **List any criticisms** |  |
| 1. The feedback from the students is…...
2. The survey conducted by the faculty quality assurance unit scored …%.
3. The results of the survey offered by the

department:  ILO’s (…./5)  Comment: ……………………. |

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| --- | --- |
| **3. Comments from external evaluator(s):** | **Response ofCourse Team** |
|  |  |
| **4. Course Enhancement:** |  |
| Progress on actions identified in the previous year’s action plan: |
| **Action:**Equip class halls with sound system and data show | Completed  |
|  |  |
| 1. **Action Plan for Academic Year 2014-2015**
 |  |
| **Actions Required**  | **Completion Date** | **Person Responsible** |
| Improvement of class halls |  |  |
| **Course Coordinator:**  | Prof. Salwa Raafat |
| **Signature:** |  |