



## A. Basic Information

|   |                     |                     |
|---|---------------------|---------------------|
| <b>Course Title:</b> Law for engineers  | <b>Code:</b> GEN173 | <b>Total:</b> 4     |
| <b>Lecture:</b> 4   | <b>Tutorial:</b>    | <b>Practical:</b> - |
| <b>Program on which the course is given:</b> B.Sc. Electrical Engineering (Power) |                     |                     |
| <b>Major or minor element of program:</b> Major                                   |                     |                     |
| <b>Department offering the program:</b> Electrical Engineering Department         |                     |                     |
| <b>Department offering the course:</b> Electrical Engineering Department          |                     |                     |
| <b>Academic year / level:</b> First Year / Second Semester                        |                     |                     |
| <b>Date of specifications approval:</b> 10/5/2006                                 |                     |                     |

## B. Professional Information

### 1. Overall aims of course

By the end of the course the students will be able to:

- 1- Understand the broad classifications of laws, rules and responsibilities; those may be concerned by engineers.
- 2- Understand contracts, legislations and laws in fields such as construction, safety and environment.
- 3- Understand contracts, legislations and laws in fields of insurance and investment.
- 4- Understand legislations and laws in fields of Engineers Syndicate.

### 2. Intended Learning outcomes of Course (ILOs)

#### a. Knowledge and Understanding:

- a.9) Topics related to humanitarian interests and moral issues.

#### b. Intellectual Skills



- b.4) Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.  
b.7) Solve engineering problems, often on the basis of limited and possibly contradicting information.

**c. Professional and Practical Skills**

- c.1) Apply knowledge of mathematics, science, information technology, design, business context and engineering practice to solve engineering problems.

**d. General and Transferable Skills**

- d.2) Work in stressful environment and within constraints.  
d.7) Search for information and engage in life-long self learning discipline.

**3. Contents**

| No | Topic   | No. of hours | ILOs                       | Teaching / learning methods and strategies | Assessment method                               |
|----|---|--------------|----------------------------|--|---|
| 1  | Engineering laws, rules and legislations        | 4            | a.9, b.4, b.7,c.1,d.2      | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |
| 2  | Engineering laws, rules and legislations        | 4            | a.9, b.4, b.7,c.1,d.2      | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |
| 3  | Engineering laws, rules and legislations        | 4            | a.9, b.4, b.7,c.1,d.2      | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |
| 4  | Drafting and negotiating engineering contracts. | 8            | a.9, b.4, b.7,c.1,d.2      | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |
| 5  | Drafting and negotiating engineering contracts. | 4            | a.9, b.4, b.7,c.1,d.2      | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |
| 6  | Construction, environment, roads laws.          | 4            | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework             | Assignments, Quizzes, Mid-term exam, Final exam |



|    |  |   |                            |                                |   |
|----|--|---|----------------------------|--------------------------------|---|
| 7  | Construction, environment, roads laws.                       | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 8  | Mid Term Exam  |   |                            |                                |   |
| 9  | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 10 | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 11 | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 12 | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 13 | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 14 | Insurance and safety laws application in electrical systems. | 4 | a.9, b.4, b.7,c.1,d.2, d.7 | Lectures, Case study, homework | Assignments, Quizzes, Mid-term exam, Final exam |
| 15 | Final exam   |   |                            |                                |   |
| 16 |  |   |                            |                                |   |

**4. Teaching and Learning Methods**

- \_\_\_\_\_ Lectures
- \_\_\_\_\_ Case study
- \_\_\_\_\_ Assignments / homework

**5. Student Assessment Methods**

- 1- Assignments to assess knowledge and intellectual skills.
- 2- Quiz to assess knowledge, intellectual and professional skills.
- 3- Mid-term exam to assess knowledge, intellectual, professional and general skills.
- 4- Final exam to assess knowledge, intellectual, professional and general skills.



## 6. Assessment schedule

Assessment 1 on weeks 2, 4, 6, 9, 11, 13

Assessment 2 Quizzes on weeks 3, 5, 7, 10, 12

Assessment 3 Mid-term exam on week 8

Assessment 4 Final exam on week 15

## 7. Weighting of Assessments

|     |                        |
|-----|------------------------|
| 03% | Home assignments       |
| 03% | Quizzes                |
| 14% | Mid-term examination   |
| 80% | Final-term examination |

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100% Total

## 8. List of References

- Course notes prepared by instructor. By Prof. Dr. Fahmy Bendary , Prof. Dr. Mohamed Moenes Salama

### 8.1 Essential books

1- القانون رقم 40 لسنة 1972 بإنشاء نقابة التجاربيين .

2- القانون رقم 66 لسنة 1974 بإنشاء نقابة المهندسين .

3- القانون رقم 68 لسنة 1974 بإنشاء إتحاد نقابة المهندسين والنقابات الفنية - وزارة الصناعة والثروة المعدنية ، الطبعة الرابعة 1999 .



- 4- القانون رقم 1.6 لسنة 1976 - وزارة الصناعة والتنمية التكنولوجية ، الطبعة العاشرة 2003 في شأن توجيه وتنظيم أعمال البناء المعدل بالقانون 1.1 لسنة 1996 ولائحته التنفيذية الصادرة بقرار وزير الإسكان والمرافق رقم 268 لسنة 1996 والقرارات المتعلقة بهما .
- 5- القانون رقم 89 لسنة 1998 - وزارة التجارة الخارجية والصناعة - الطبعة الثانية عشرة 2004 بشأن المناقصات والمزايدات ولائحته التنفيذية الصادره بقرار وزير الماليه رقم 2367 لسنة 1998 .
- 6- القرار الصادر من وزير الإقتصاد والتجارة الخارجية رقم 231 لسنة 1995 - وزارة الصناعة والثروة المعدنية ، الطبعة الثانية 1999 .

## 8.2 Recommended books

- 1- القانون رقم 17 لسنة 1999 - وزارة الصناعة والتنمية التكنولوجية ، الطبعة الثالثة 2003 .
- 2- القانون المدني - وزارة الصناعة والتنمية التكنولوجية - الطبعة التاسعة 2004 .

## 9. Facilities required for teaching and learning

Lecture room equipped with overhead projector  
Presentation board, computer and data show

**Course coordinator:** Dr. By Prof. Dr. Fahmy Bendary , , Prof. Dr. Mohamed Moenes Salama

**Course instructor:** Dr. Prof. Dr. Mohamed Moenes Salama

**Head of Department:** Prof. Dr. Mousa Abd-Allah

**Date:** 15/2/2012