A- Basic Information

Course Title: Engineering drawing and isometric Code: MEC 001
Lecture: $\text{Tutorial: } 4$ Practical: - Total: 4
Program on which the course is given: B.Sc. Mechanical Engineering (Power)
Major or minor element of program: Major
Department offering the program: Mechanical Engineering Department
Department offering the course: Physics and Sciences Department
Academic year / level: Prep Year / Second Semester
Date of specifications approval: 10/5/2006

B- Professional Information

1- Overall aims of course:
The main purpose of this course is to introduce the principle of engineering drawing and develop the ability to visualize an object with physical and dimensional configurations.

2- Intended learning outcomes of course (ILOs)
By completion of the course, the student should be able to:

a- Knowledge and Understanding
a.2) Basics of information and communication technology (ICT).
a.3) Characteristics of engineering materials related to discipline.
a.8) Current engineering technologies as related to disciplines.

b- Intellectual Skills
b.2) Select appropriate solutions for engineering problems based on analytical thinking.
b.3) Think in a creative and innovative way in problem solving and design.

c- Professional and Practical Skills
c.2) Professionally merge the engineering knowledge, understanding, and feedback to improve design, product and/or services.

d- General and Transferable Skills
d.2) Work in stressful environment and within constraints.

3- Contents

<table>
<thead>
<tr>
<th>Topic No.</th>
<th>Topic</th>
<th>Weeks</th>
<th>ILO’s</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of Third Projection</td>
<td>3</td>
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<tr>
<td>2</td>
<td>Sectional Views</td>
<td>4</td>
<td></td>
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<tr>
<td>3</td>
<td>Structural Steel Drawing</td>
<td>3</td>
<td></td>
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<tr>
<td>4</td>
<td>Fasteners</td>
<td>2</td>
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<td>5</td>
<td>Assembly Drawing</td>
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COURSE SPECIFICATIONS (2010-2011)

Benha University  Faculty of Engineering at Shobra  Mechanical Engineering Department

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<tr>
<td>6</td>
<td>7</td>
<td>Total</td>
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<td></td>
<td></td>
<td>14 weeks</td>
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<td>56 hours</td>
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4- Teaching and Learning Methods
   Lectures
   Practical training
   Class activity
   homework

5- Student Assessment Methods
   Assignments to assess knowledge and intellectual skills.
   Mid-term exam to assess knowledge, intellectual, professional and general skills.
   Final exam to assess knowledge, intellectual, professional and general skills.

Assessment Schedule
   Assessment 1 on weeks 2-14
   Assessment 3 Mid-term exam on week 8
   Assessment 5 Final exam on week 15

Weighting of Assessments
   05% Home assignments
   20% Mid-term examination
   15% First Term
   50% Final-term examination
   10% Cass assignments
   100% Total

6- List of References
   Course notes
      Course notes prepared by instructor.
   Essential books
      Newnes. ISBN 0 7506 5120 2
   Recommended books

7- Facilities required for teaching and learning
   Lecture room computer and data show
   Drawing Hall

Course coordinator:  Prof. Dr. Tarek Khalifa
Course instructor:   Dr. Hossam Zakaria
COURSE SPECIFICATIONS (2010-2011)

Benha University    Faculty of Engineering at Shobra    Mechanical Engineering Department

Head of Department:  Prof. Dr. Ali Al Sabaagh           Date: December 5, 2011