Course Specifications

University: Benha University  Faculty: Benha Faculty of Engineering

Course specifications
Programme(s) on which the course is given  All programs
Major or minor element of programmes  N.A.
Department offering the programme  All Departments
Department offering the course  Mechanical Engineering Technology
Academic year / Level  First
Date of specification approval

A- Basic Information

Title: Technology and Society  Code: M 162
Credit Hours: N.A.  Lecture: 2
Tutorial: 0  Practical: 0  Total: 2

B- Professional Information

1 - Overall aims of course
This course aims to give the students a general overview on the applications of modern technologies on the society. Different fields of society applications are considered such as energy sources, transportation and communications.

2- Intended learning outcomes of course (ILOs)

a. Knowledge and understanding:
   a.1 Understand modern trends in technology
   a.2 Understand the effect of modern technology in the development of the society
   a.3 Explain the advantages and disadvantages of modern technology
   a.4 Understand the problems and shortcomings of modern technology
   a.5 List the applications of the technology in different fields of engineering
b. Intellectual skills
N.A.

c- Professional and practical skills
N.A.

d- General and transferable skills
N.A.

3- Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of Hours</th>
<th>Lecture</th>
<th>Tutorial/Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to society development</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>– Energy sources</td>
<td>4</td>
<td>4</td>
<td>0</td>
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<tr>
<td>– Transportation</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>– Communications</td>
<td>4</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Manufacturing techniques</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>– Engines</td>
<td>6</td>
<td>6</td>
<td>0</td>
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<tr>
<td>– Materials</td>
<td>6</td>
<td>6</td>
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<tr>
<td>– Manufacturing technology</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Computers and the future</td>
<td>4</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Technology and environmental problems</td>
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<td>6</td>
<td>0</td>
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<tr>
<td>The role of technologists in enhancing the profession.</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

4– Teaching and learning methods

4.1-Lectures
4.2-...........................
4.3-...........................
4.4-...........................

5- Student assessment methods
5.1 Mid term exam
5.2 Final exam

**Assessment schedule**

- Assessment 1 .................. Week 7
- Assessment 2 .................. week 12
- Assessment 3 .................. Week 15

**Weighting of assessments**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Mid-term examination</td>
<td>20%</td>
</tr>
<tr>
<td>Final-term examination</td>
<td>60%</td>
</tr>
<tr>
<td>Oral examination</td>
<td>%</td>
</tr>
<tr>
<td>Practical examination</td>
<td>%</td>
</tr>
<tr>
<td>Semester work</td>
<td>20%</td>
</tr>
<tr>
<td>Other types of assessment</td>
<td>%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Any formative only assessments

**6- List of references**

- **6.1- Course notes**
  
  Lecture notes

- **6.2- Essential books (text books)**
  
  N.A.

- **6.3- Recommended books**
  
  N.A.

- **6.4- Periodicals, Web sites, … etc**
  
  N.A.

**7- Facilities required for teaching and learning**

Data show

Whiteboard
Course coordinator: Dr. Ahmed Kassem
Head of Department: Prof. Sameh Nada
Date: 1/3/2009