University: Benha University  
Faculty: High Institute of Technology

Course specifications

Course Description
- Ergonomics (Instrument design, machines and controls, Layout of workplace) – Noise (Measurement and precautions) – Heating and ventilating (air – conditioning, heating methods) – Lighting (Measurement, amount, type, practice) – Human effectiveness (Principles for the industrial engineer, human productivity and work design, wage and salary administration, job evaluation) – Industry as Environment.
- Degree of Engineering and Technology in Mechanical Engineering (Production and Power), in Electrical Engineering (Electronic and control)

Departments offering these programs are:
- Mechanical Engineering

Academic year / Level
- Third year

Date of specification approval
- 2009 G.
A- Basic Information
Title: Industrial Psychology   Code: M 360
Credit Hours: 2   Lecture: - 2
Tutorial: -   Practical: -   Total: 2

B- Professional Information
1 - Overall aims of course
   • Evaluate job analysis – individual analysis and Matching
   • Evaluate human performances and human effectiveness
   • Ability to perception, judgment and decision
   • How to work in a team work
   • Use case study to evaluate actual performance of the job
   • Reports

2- Intended learning outcomes of course (ILOs)
   • Work within a group
   • Use Internet to get information and data
   • Using workshops and labors
   • Work within a group in a mini-project

a. Knowledge and understanding:
   a.1 Know perception, judgment and decision
   a.2 Know Group cohesiveness
   a.3 Know Human relations
   a.4 Know Vocational Adjustment
   a.5 Know Satisfactoriness and Satisfaction
   a.6 Familiarization with layout of workplace

b. Intellectual skills
   b.1 Instrument design
   b.2 Machines and control
   b.3 Quality system
   b.4 Conduct check procedure against job analysis and individual analysis
c- Professional and practical skills
   c.1 Design simple and efficient methods for workplace
   c.2 Design a schedule for observation, Interview and Questionnaire

d- General and transferable skills
   d.1 Gain enough experience to deal with workshop tasks
   d.2 Develop team working skills
   d.3 Group Morale
   d.4 Total Quality management

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>Psychology and Industrial Psychology (General)</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Matching and Distinctions (differences) Individual</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Vocational Adjustment</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Human performance and Human relations, Humanity Engineering</td>
<td>6</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Morale Motivations and Incentives</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Design schedules for layout of workplace and Others</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Reports</td>
<td>6</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

4- Teaching and learning methods
   4.1 Direct instruction
   4.2 Project advising
   4.3 Term report

5- Student assessment methods
   5.1 Quizzes to assess understanding and transferable skills
   5.2 Mid Term to assess intellectual and transferable skills
5.3 Report to assess intellectual and transferable skills
5.4 Final Exam to assess intellectual and transferable skills

Assessment schedule

Assessment 1 Quizzes Week five or six times
Assessment 2 Mid -Term Week end of the term
Assessment 3 Mini project Week end of the term
Assessment 4 Final Exam Week end of the term

Weighting of assessments

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term examination</td>
<td>20 %</td>
</tr>
<tr>
<td>Final-term examination</td>
<td>40 %</td>
</tr>
<tr>
<td>Oral examination</td>
<td>20 %</td>
</tr>
<tr>
<td>Semester work</td>
<td>10 %</td>
</tr>
<tr>
<td>Report</td>
<td>10 %</td>
</tr>
<tr>
<td>Total</td>
<td>100 %</td>
</tr>
</tbody>
</table>

6- List of references

- Course notes

6.2- Essential books (text books)
  - Lecture Notes

6.3- Recommended books
  - Same books

7- Facilities required for teaching and learning

Possible E-Learning

Course coordinator: Dr. Ahmed Kassem
Head of Department:
Date: //