Course specification

University/Academy: Damanhour
Faculty/Institute: Science
Department: Botany

1. course Data:

<table>
<thead>
<tr>
<th>Course code: BOT (308)</th>
<th>Course title: plant Ecology</th>
<th>Academic year/level: 2009\2010 third year/2\textsuperscript{nd} term</th>
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</table>

Specialization: Botany

| No. of instructional units: lecture 2 practical 3 |

2. course Aim

The aim for all awards in the course is to understand the principles of plant ecology. Understand the vegetation, structure and synthetic characteristics of vegetation structure communities besides, student has to realize the population interaction in their communities.

3. Intended learning outcome

a) Knowledge and understanding

A1: Define vegetation structure and synthetic characteristics of vegetation structure communities.
A2: Describe the population interactions in their communities.
A3: Illustrate the basic knowledge about biodiversity.
A4: Give the significant differences between biotic and biotic components of ecosystem.
A5: Describe the structure of ecosystem and environmental factors.
A6: List basic concepts of dynamics of ecosystem.

b) Intellectual skills

By the end of the course, the students are expected to develop higher order skills that are reflected in their ability to:
B1: Differentiate between biotic and a biotic components of ecosystem.
B2: Discover the structure of ecosystem and mineral cycles.
B4: Determine the environmental factors that effects on living organisms.
B5: Conclude the basic knowledge of ecology in biodiversity.
B6 Conclude the basic knowledge of vegetation analysis.
By the end of the course, students will be able to:

**c) Professional skills**

C1: Demonstrate the main features of ecosystem structure
C2: Demonstrate the main features of biodiversity.
C3: Demonstrate the main features population in their communities
C4: Show difference between the ecosystems components.
C5: Examine the environmental factors and ecosystem dynamics in the field.

**d) General skills**

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

D1: Exchange ideas, principles and information by oral, written and visual means.
D2: Work effectively both in a team and independently.
D3: Use the information technology to gather information and right reports.

### 4. course content

- Vegetation structure
- synthetic characteristic of Vegetation structure communities
- the physical environment of the ecosystem
- Methods of measurement of the physical environment of the ecosystem
- Vegetation analysis of plant populations
- The distribution of plant populations
- Identification of plant communities
- description of plant communities
- biodiversity
- Ecological factors
- Concepts, types, examples of their effect on plants

### 5. Teaching and learning methods

- Lectures and seminars.
- Lab work.
- Problems.
- Course work, essay

### teaching and learning methods for students with special needs

- 5.1. Written exam.
- 5.2. Practical exam.
- 5.3. Problems.
- 5.4. Assignments.
a) Procedures used:  

b) Schedule:  

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weeks</th>
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</thead>
<tbody>
<tr>
<td>1: Quizzes</td>
<td>4-7</td>
</tr>
<tr>
<td>2: Mid term exam</td>
<td>8</td>
</tr>
<tr>
<td>3: Practical exam</td>
<td>15</td>
</tr>
<tr>
<td>4: Final term exam</td>
<td>16</td>
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</tbody>
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c) Weighing of Assessment:  

<table>
<thead>
<tr>
<th>Weighing of Assessments</th>
<th></th>
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<tbody>
<tr>
<td>Mid-Term Examination</td>
<td>10</td>
</tr>
<tr>
<td>Final-Term Examination</td>
<td>100</td>
</tr>
<tr>
<td>Practical Examination</td>
<td>30</td>
</tr>
<tr>
<td>Semester Work</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
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</tbody>
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7. List of Textbooks and References:

a) Course Notes  

- Plant ecology

b) Required Books  

<table>
<thead>
<tr>
<th>Textbooks</th>
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<tbody>
<tr>
<td>Periodicals, Web Sites, etc</td>
</tr>
<tr>
<td><a href="http://www.Plant">www.Plant</a> ecology.com</td>
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