Course specification

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

1. course Data:

<table>
<thead>
<tr>
<th>Course code: <strong>Bot 308</strong></th>
<th>Course title: <strong>Plant Ecology</strong></th>
<th>Academic year/level: 2009/2010 3rd year student 2nd term</th>
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</thead>
<tbody>
<tr>
<td>Specialization: Chemistry / botany</td>
<td>No. of instructional units: lecture 2 practical 3</td>
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2. course Aim

The aim for all awards in the course is to understand the principles of plant ecology, vegetation, structure and synthetic characteristics of vegetation structure communities. Also the environmental factors of biotic and biotic components will be provided as a general knowledge.

3. Intended learning outcome

a) Knowledge and understanding

A1: List the vegetation and synthetic characteristics of vegetation structure communities.
A2: Describe the population interactions in their communities
A3: Write 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: Describe basic concepts of dynamics of ecosystems

b) Intellectual skills

B1: Differentiate between biotic and a biotic components of ecosystem.
B2: Discover the structure of ecosystem and mineral cycles.
B4: Evaluate the environmental factors that effects on living organisms.
B5: Conclude the basic knowledge of ecology in biodiversity.
B6 Analysis vegetation Ecosystem of several fields.
## Professional skills

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

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

## 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 write reports.

## 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

## Teaching and learning methods

- 1. Lectures and seminars.
- 2. Lab work.
- 3. Problems.
- 4. Course work, essay

## 5. Teaching and learning methods for students with special needs

N/A
6. Student Assessment

| a) Procedures used: | Assessment 1: Quizzes.  
| | Assessment 2: Mid term exam.  
| | Assessment 3: Practical exam.  
| | Assessment 4: Final term exam.  

b) Schedule: |
| Assessment 1: Quizzes. | Week: 4-7  
| Assessment 2: Mid term exam. | Week: 8  
| Assessment 3: Practical exam. | Week: 15  
| Assessment 4: Final term exam. | Week: 16  

c) Weighing of Assessment: |
| Semester work | 10  
| Mid term exam | 10  
| Practical examination | 30  
| Final term exam | 100  
| **Total** | **150**  

7. List of Textbooks and References

| a) Course Notes | Lecture notes on Plant ecology  
| c) Recommended Books | 1- Plant Ecology  
| | 2- Allelopathy – Chemistry  
| | 3- Allelochemicals and Advanced Ecological Theory  
| d) Periodicals, web sites,…etc | www.Plant ecology.com  

Course Instructor: 

Head of Department: Dr.

Date: 20/8/2009