Course specification

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

1. course Data:		
Course code:**Bot 308**	Course title: **Plant Ecology**	Academic year/level: 2009/2010 3rd year student 2 nd term
Specialization: Chemistry / 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, 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.

c) 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 population in their communities C4: Show difference between the ecosystems components. C5: Explain 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 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. Assessment4: Final term exam.
b) Schedule:	Assessment 1: Quizzes. Week: 4-7 Assessment 2: Mid term exam. Week: 8 Assessment 3: Practical exam. Week: 15 Assessment4: 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
b) Required Books (Textbooks)	- Archibold, O. W. *Ecology of World Vegetation*. New York: Springer Publishing, 1994. - Feldmeyer-Christie, E., N. E. Zimmerman, and S. Ghosh. *Modern Approaches In Vegetation Monitoring*. Budapest: Akademiai Kiado, 2005.
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