Course specification

University/Academy: Alexandria, Damanhour branch
Faculty/Institute: Science
Department: Botany

1. course Data:		
Course code:**Bot423** ------	Course title: **Fungi and Physiology of Fungi**	Academic year/level: 2010/2011 **4th year students** 1st term
Specialization: Chemistry/ Botany	No. of instructional units: lecture 2 practical 3	

2. course Aim	By the end of the course, students will be able to: The aim of this course is to provide the student with a general outline of the various aspects of the life history of fungi. Their role in nature, habitats, structure, reproduction and it deals also with the classification of the different groups of fungi and give an emphasis on the important genera and physiology of fungi
3. Intended learning outcome	
a) Knowledge and understanding	By the end of the course, students will be able to: A1- Write the different uses of fungi as a major group of microorganisms. A2- Classify of fungi into different groups A3- List some examples of each fungi group A4: List and illustrate the metabolic reactions in microorganisms. A5. Name and tabulate the nature of fungal growth Identify and show the role of fungi in our nature
b) Intellectual skills	By the end of the course, the students are expected to B1: Develop higher order skills that are reflected in their ability to: B2: Analyze essential facts, concepts, principles and theories that relating to the subject areas identified above. B3:

	Evaluate some modern laboratory techniques, methods instrumentation and data analysis
c) Professional skills	By the end of the course, students will be able to: C1: Practice their practical skills and understand the scientific approach in microbiology and related branches. C2: Conduct skills that enable a harmonic working group for academia and industry
d) General skills	By the end of the course, students will be able to: Use information and communication technology, covering both written and oral communication. D2: Work in groups, counsel effectively both in a team and independently
4. course content	**Mycology** 1-Introduction to Fungi 2- Basis of classification of fungi: Group: Myxomycotina Group: Eumycotina Class: Phycomycetes Class : Ascomycetes Class : Ascomycetes (Continued) Class : Ascomycetes (Continued) Class: Basidiomycetes Class: Basidiomycetes (Continued) Class: Deuteromycetes Class: Deuteromycetes (Continued) **Physiology of fungi** 1-Role of fungi in nature 2-Fungal growth 3-Measurement of fungal growth 4-Media: natural, synthetic and semi-synthetic media 5-Physical factors affecting growth 6-Nutritional factors affecting growth 7-Vitamins and growth factors

5. Teaching and learning methods	----------
6. teaching and learning methods for students with special needs	• Lectures and seminars. • Lab work. Prepared microscopic slides, preserved fungal specimens.
7. Student Assessment	Mid-term exam Final practical exam Final written exam
a) Procedures used:	----------
b) Schedule:	Assessment: Mid-term exam week 7 Assessment: Practical exam Week: 14 Assessment: Final term exam Week: 16
c) Weighing of Assessment:	Mid-term exam 10(6.66%) Practical examination 40 (26.66%) Final term exam 100 (66.66 %) Total 50 (100%)
8. List of Textbooks and References:	-6.1.**Course Notes:** Prepared by the lecturer 6.2.Tortora, G., Funke, B., Case, C. (2002). Microbiology: An Introduction 7th edition, Cummings Publishing Co. 6.3 David H J (1995) The Physiology of Fungal Nutrition. Page: 87-205. Neidhardt F C, Ingraham J L, Schaechter M, Sinunauer inc. publisher (1990) Physiology of Bacterial Cell. Page: 351-388. 6.4 Tortora, G.J., B.R. Funke, and C.L. Case. 2005. *Microbiology: An Introduction, Brief Edition*. Pearson Benjamin Cummings, San Francisco, California. 6.5 Johnson, T.R. and C.L. Case. 2007. *Laboratory Experiments in Microbiology*,8th edition. Pearson Benjamin Cummings, San Francisco, California

	B. H. Kim and G. M. Gadd 2008 Bacterial Physiology and Metabolism. Cambridge University Press **6.6** Webster,J.(1999) Introduction to Fungi.Second edition. Cambridge University Press **6.7** Vashishta,B. R.and Sinha, A. K.(2007) Fungi. Tenth edition. Chand, S. and Company Limited , New Delhi
a) Course Notes	----------
b) Required Books (Textbooks)	----------
c) Recommended Books	----------
d) Periodicals, web sites,…,etc	----------

Course Instructor: ----------
Date: -----/-----/----

Head of Department: ----------