Al-Azhar University (Girls branch)
Faculty of Science
Department of Zoology

جامعة الأزهر (فرع البنات)
كلية العلوم
قسم علم الحيوان

Course Specification

Course title: Insect Taxonomy **Code:** Ent. 308

Program (s) on which the course is given: Entomology (chemistry)

Element of program : Major - **Single** [ ] Double [√]

Department offering the program: Zoology Department

Department offering the course: Zoology Department

Academic year: 3rd year – 2nd semester

Date of specification approval: 1/2016

A- Basic information

Academic year: 3rd	**Course title:** Insect Taxonomy		**Code:** Ent. 308
Lecture: 2 hr/wk	**Practical:** 2 hr/wk	**Tutorial:** 0 hr/wk	**Total:** 4 hr/wk

B- Professional information

1- Overall aims of course	This course aims to provides student with knowledge and understanding: Demonstrate the taxonomy and characters of insects; differences between suborders of each order, and characters of different families of each order.

2-Intended learning outcomes of course (ILOs)

a-Knowledge and understanding	By the end of this course student must be able to: a1- Describe and identify the insect using the characters of the class. a2-Discuss the differentiation between the insects of different orders.
b-Intellectual	b1- Assess the identification of the insect from the other arthropods

skills	b2- Analyze a wide range of biological data for qualitatively and quantitatively investigations of various insects orders.
c- Professional and practical skills	c1- Use the correct method for dealing with biological data and taxonomic character to differentiate between insects. c2-Employ contemporary information retrieval, insect rearing, taxonomic keys and bioassays
d- General and transferable skills	d1- Work in team effectively, manage time collaborate and communicate with other positively during laboratory investigation of different insect samples.

3- Contents:

Topic	No. Hours/ week			
	Lecture	**Practical**	**Tutorial**	**Total**
1- General characters and classification of Order Thysanura, Collembola and Ephimeroptera **2-** General characters and classification of order Odonata and Orthoptera **3-** General characters and classification of order Phasmida and Dermaptera **4-** General characters and classification of order Embioptera Dicytoptera and **5-** General characters and classification of order Isoptera and Psocoptera **6-** General characters and classification of order Mallophaga and Siphunculata **7-** General characters and classification of order Hemiptera and Thysanoptera **8-** General characters and classification of order Neuroptera and Lepidoptera **9-** General characters and classification of order Diptera **10-** General characters and classification of order Siphonaptera and Hymenoptera **11-** General characters and classification of order coleopteran	2	2	0	4

4- Teaching and learning methods

4.1. Teaching lectures

4.2. laboratory lessons (practical examination to the biological samples)

4.3. Assays and reporting in different topics

5- Student assessment:

5.1. Methods	5.1.1. Written exam (short & final)	- To assess: knowledge & understanding - Intellectual skills
	5.1.2. Oral exam	- To assess: knowledge & understanding - Intellectual skills
	5.1.3. Practical exam	- To assess: Professional & practical skills
	5.1.4. Work sheets and essays	- To assess: General & transferable skills
5.2. Assessment schedule	Assessment 1: Short exam Final written exam	- Along the term - Week: according to faculty's exam schedule
	Assessment 2: Oral exam	- Week: 7
	Assessment 3: Final lab exam	- Week: 10
	Assessment 4: Semester work	- Along the term
5.3. weighting of assessments	Final written exam %	50%
	Final lab exam %	30%
	Semester work & short exam %	14%
	Oral exam %	6%
	Total %	100%

6-List of references

6.1. Text Book	- Chapman, R.F. (Reginald Frederick) The insects: structure and function / R.F. Chapman. – 4th ed. (1998) . - Wigglesworth, V.B. (1972). The Principles of Insect Physiology. London: Methuen.
6.1. Course Note (If available)	❖ College Entomology.
6.2. Text Book	❖ Books of classification of insects. ❖ Biology of Insects
6.3. Recommended books	❖ Entomology, classification. ❖ General Entomology.

7- Facilities required for teaching and learning

7.1. Lecture room provided with a white board..
7.2. Student lab provided with preserved samples.
7.3. Course note.

8- Matrix between course specification ILOs and ILOs of Entomology (Chemistry) program

Knowledge and understanding		Intellectual skills		Professional and practical skills		General and transferable skills	
ILOs of course	ILOs of program	ILOs of course	ILOs of program	ILOs of course	ILOs of program	ILOs of course	ILOs of program
a1	A16	b1	B8	c1	C2,C4,C7	d1	D4
a2	A4	b2	B9	c2	C3,C5,C8,C9		

9- Curriculum map

Contents	Weeks	Course ILOs				Teaching & learning methods	Assessment methods	Evidence
		a	b	c	d			
Order Thysanura, Collembola , Ephimeroptera Odonata and Orthoptera	1-2	a1& a2	b1& b2	c1& c2	d1	- Lectures & practical labs	- Short &final written exams - Practical exam - Oral exam - Semester work	–Course file –Exam. on paper
Order Phasmida Dermaptera, Embioptera, Dicytoptera, Isoptera and Psocoptera	3-4	a1& a2	b1 & b2	c1& c2	d1	- Lectures & practical labs		
ɔrder Mallophaga, Siphunculata, Hemiptera, Thysanoptera and Neuroptera	5-7	a1& a2	b1& b2	c1& c2	d1	- Lectures & practical labs		
Order Lepidoptera, Diptera, Siphonaptera Hymenoptera and Coleoptera	8-10	a1& a2	b1 & b2	c1& c2	d1	- Lectures & practical labs		

Course coordinator:

Name: Prof. Dr Wedad Ahmed Atwa

Head of Zoology Department:

Name: Prof. Dr. : Zenab ead