هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	**Entomology**
Course Code:	**2013102-3**
Program:	**Bachelor in General Biology**
Department:	**Biology Department**
College:	**College of Sciences**
Institution:	**Taif University**

Table of Contents

A. Course Identification

1. Credit hours:	3 hr
2. Course type	
a.	University ☐ College ☐ Department ☑ Others ☐
b.	Required ☑ Elective ☐
3. Level/year at which this course is offered:	8th level / 3rd year
4. Pre-requisites for this course (if any):	Invertebrates / 2012204-3
5. Co-requisites for this course (if any):	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	6 hr/Week	100%
2	**Blended**	-	-
3	**E-learning**	-	-
4	**Distance learning**	-	-
5	**Other**	-	-

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	20
3	**Tutorial**	--
4	**Others** (specify)	--
	Total	50

B. Course Objectives and Learning Outcomes

1. Course Description

This course deals with studying identification of insects and its distribution, the insect orders and families, the external and internal structures, the function of different insect organs and the environmental effects on insect behavior.

2. Course Main Objective

By the end of this course, the student acquire an appropriate background about traditional economic entomology, emphasizing pest insect population dynamics, sampling, surveillance, economic decision levels, and aspects of pest management theory and insect control.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Classify insects based on relevant biological characteristics.	K2
2	**Skills:**	
2.1	Apply different biological concepts related to entomology using professional and academic skills.	S1

CLOs		Aligned PLOs
2.2	Recognize the importance of insects in medical, economic and environmental fields.	S3
3	**Values:**	
3.1	Demonstrate commitment to learn and work independently and effectively.	V1
3.2	Assess presentation performance to discuss advanced scientific topics.	V3

C. Course Content

No	List of Topics	Contact Hours
1	**Chapter 1:** Introduction and distribution of insects.	3L+2P
2	**Chapter 2:** Cuticle, molting, hormonal effect. Body Regions (Head, Thorax, Abdomen)	6L+4P
3	**Chapter 3:** Digestive system	3L+2P
4	**Chapter 4:** Respiratory system	3L+2P
5	**Chapter 5:** Circulatory system	3L+2P
6	**Chapter 6:** Excretion system	3L+2P
7	**Chapter 7:** Muscular system	3L+2P
8	**Chapter 8:** Reproductive system and metamorphosis	6L+4P
Total		30L+20P

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Classify insects based on relevant biological characteristics.	Lectures Concept maps	Paper-based exams
2.0	**Skills**		
2.1	Apply different biological concepts related to entomology using professional and academic skills.	Open discussion Small group activities	Paper-based exams Final practical exam
2.2	Recognize the importance of insects in medical, economic and environmental fields.	Interactive learning Brain storming	Practical reports Final practical exam
3.0	**Values**		
3.1	Demonstrate commitment to learn and work independently and effectively.	Open discussion Small group activities	Practical reports Assignments
3.2	Assess presentation performance to discuss advanced scientific topics.	Small group activities Interactive learning	Assignments

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm Exam	5th	20%
2	Semester Activities	Periodic	10%

#	Assessment task*	Week Due	Percentage of Total Assessment Score
3	Practical Reports	Weekly	20%
4	Final Practical Exam	11th	10%
5	Final Exam	12th	40%
Total			**100%**

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

6 hours per week (as defined in the teaching schedule of the faculty member) for academic advice and consultations.
Teaching staff is also available using Blackboard web site and Taif University "Edugate" system.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	- Chapman R.F., Simpson S.J. and Douglas A.E. (2012). The Insects: Structure and Function. 5th Edition, Cambridge University Press, pp. 961. - ياسر عفيفي السيد (٢٠١٥). علم الحشرات العام، دار المسيرة للنشر والتوزيع، عمان، الأردن، الطبعة الثانية.
Essential References Materials	- James L. Nation Sr. (2015). Insect Physiology and Biochemistry. 3rd Edition, CRC Press, Taylor & Francis Group, New York, USA.
Electronic Materials	Blackboard website Website of Saudi digital Library
Other Learning Materials	Computer-based programs and professional software.

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	- Classrooms for 40 students\lecture. - Laboratory for 20 students\ lab activity
Technology Resources (AV, data show, Smart Board, software, etc.)	- Data show
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	- Slide projector. - Permanent slides. - Preserved specimens.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Indirect
Quality of learning resources	Peer Reviewer	Direct

Evaluation Areas/Issues	Evaluators	Evaluation Methods
	Students	Indirect
Extent of achieving the course learning outcomes	Peer Reviewer Students	Direct Indirect

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	**Biology Department**
Reference No.	**Committee number 14 - Academic Year 1442-1443H**
Date	**22\5\2022G – 21\10\1443H**

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Department of Biology

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