



## Course Specifications

<b>Course Title:</b>	<b>Entomology</b>
<b>Course Code:</b>	<b>2013102-3</b>
<b>Program:</b>	<b>Bachelor in Zoology</b>
<b>Department:</b>	<b>Biology Department</b>
<b>College:</b>	<b>College of Sciences</b>
<b>Institution:</b>	<b>Taif University</b>

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## A. Course Identification

<b>1. Credit hours:</b> 3 hr
<b>2. Course type</b>
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
<b>3. Level/year at which this course is offered:</b> 8 <sup>th</sup> level / 3 <sup>rd</sup> year
<b>4. Pre-requisites for this course (if any):</b> Invertebrates / 2012204-3
<b>5. Co-requisites for this course (if any):</b> 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	30
3	Tutorial	--
4	Others (specify)	--
	<b>Total</b>	<b>60</b>

## B. Course Objectives and Learning Outcomes

<b>1. Course Description</b> 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.
<b>2. Course Main Objective</b> 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	<b>Knowledge and Understanding</b>	
1.1	Classify insects based on relevant biological characteristics.	K2
2	<b>Skills:</b>	
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
<b>3</b>	<b>Values:</b>	
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	<b>Chapter 1:</b> Introduction and distribution of insects.	3L+3P
2	<b>Chapter 2:</b> Cuticle, molting, hormonal effect. Body Regions (Head, Thorax, Abdomen)	6L+6P
3	<b>Chapter 3:</b> Digestive system	3L+3P
4	<b>Chapter 4:</b> Respiratory system	3L+3P
5	<b>Chapter 5:</b> Circulatory system	3L+3P
6	<b>Chapter 6:</b> Excretion system	3L+3P
7	<b>Chapter 7:</b> Muscular system	3L+3P
8	<b>Chapter 8:</b> Reproductive system and metamorphosis	6L+6P
<b>Total</b>		<b>30L+30P</b>

### D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
1.1	Classify insects based on relevant biological characteristics.	Lectures Concept maps	Paper-based exams
<b>2.0</b>	<b>Skills</b>		
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
<b>3.0</b>	<b>Values</b>		
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	Activities	Continuous	10
2	Midterm Exam	5 <sup>th</sup>	20

#	Assessment task*	Week Due	Percentage of Total Assessment Score
3	Periodic Exam	7 <sup>th</sup>	10
4	Practical reports	Continuous	15
5	Final Practical Exam	11 <sup>th</sup>	5
6	Final Exam	12 <sup>th</sup>	40

\*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

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

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	- Classrooms for 40 students\lecture. - Laboratory for 20 students\ lab activity
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	- Data show
<b>Other Resources</b> (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
Extent of achieving the course learning outcomes	Students	Indirect
	Peer Reviewer	Direct
	Students	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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