



## Course Specifications

<b>Course Title:</b>	<b>Economic Botany</b>
<b>Course Code:</b>	<b>2013208-3</b>
<b>Program:</b>	<b>Bachelor in Botany</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> 9 <sup>th</sup> level – 3 <sup>rd</sup> year
<b>4. Pre-requisites for this course (if any):</b> Plant Anatomy 2013109-3
<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	20
3	Tutorial	-
4	Others (specify)	-
	<b>Total</b>	50

## B. Course Objectives and Learning Outcomes

<b>1. Course Description:</b> This course deals with studying economics of plants as well as uses of economic plants including fiber, wood, pigment, rubber, resin plants, aromatic plants, oil and wax plants, sugar, starch and cellulose plants, and fodder plants for animal and human.
<b>2. Course Main Objective:</b> By the end of this course, the student acquire an appropriate background about economics, classification and uses of economic plants.

### 3. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge and Understanding:</b>	
1.1	Recognize main principles and concepts of plant economy.	K1
1.2	Classify plants based on their economic importance and other relevant biological characters	K2
2	<b>Skills:</b>	
2.1	Utilize concepts and basics of plant economy in social and environmental contexts	S3

CLOs		Aligned PLOs
<b>3</b>	<b>Values:</b>	
3.1	Demonstrate commitment to learn and work independently and effectively.	V1
3.2	Demonstrate positive behaviors and awareness of loyalty and belonging to the homeland and its leadership values.	V3

### C. Course Content

No	List of Topics	Contact Hours
1	Introduction and economic active constituents Glycosides, Alkaloids, Tannins and Resins	3L + 2P
2	Volatile oils Cereal crops (wheat, barley and rice)	6L + 4P
3	Sugar plants (sugar cane and sugar beet)	3L + 2P
4	Oil plants (soybean, peanut, sunflower and sesame)	3L + 2P
5	Classification of fiber plants	3L + 2P
6	Fiber crops (cotton, flax, jute and hemp)	3L + 2P
7	Medicinal and aromatic plants	3L + 2P
8	Stimulant plants (tobacco, tea and coffee)	3L + 2P
9	Spice plants Forests economy	3L + 2P
<b>Total</b>		<b>30L+20P</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	Recognize main principles and concepts of plant economy	Lectures Open discussion	Paper-based exams
1.2	Classify plants based on their economic importance and other relevant biological characters	Lectures Concept maps	Paper-based exams Practical reports
<b>2.0</b>	<b>Skills:</b>		
2.1	Utilize concepts and basics of plant economy in social and environmental contexts	Open discussion Interactive learning	Paper-based exams Practical exam
<b>3.0</b>	<b>Values:</b>		
3.1	Demonstrate commitment to learn and work independently and effectively.	Small group activities Interactive learning	Practical reports Assignments
3.2	Demonstrate positive behaviors and awareness of loyalty and belonging to the homeland and its leadership values.	Small group activities Interactive learning	Assignments

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm Exam	5 <sup>th</sup>	20%
2	Semester Activities	Periodic	10%
3	Practical Reports	Weekly	20%
4	Final Practical Exam	11 <sup>th</sup>	10%
5	Final Exam	12 <sup>th</sup>	40%
<b>Total</b>			<b>100%</b>

\*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>	John H. Wiersema, Blanca León (2013). World Economic Plants, A Standard Reference, 2 <sup>nd</sup> Edition, CRC Press. النبات الاقتصادي (٢٠٠٨)، يس محمد ابراهيم، دار عزة للنشر والتوزيع، الخرطوم، السودان.
<b>Essential References Materials</b>	Afroz Alam (2012). Text Book of Economic Botany, 1 <sup>st</sup> Edition, Pointer Publishers, Jaipur, India. النبات الاقتصادي (٢٠٠٦)، عرفه أحمد عرفه، المكتبة العصرية، المنصورة، جمهورية مصر العربية.
<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.)	- Laptop and Data show
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	- Samples of economic plant parts

## G. Course Quality Evaluation

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