هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	**Phycology**
Course Code:	**331MIC**
Program:	**Biology**
Department:	**Biology**
College:	**Science**
Institution:	**Jazan University**

Table of Contents

A. Course Identification

1. Credit hours: 2
2. Course type **a.** University ☐ College ☐ Department ☑ Others ☐ **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: 5/3rd year
4. Pre-requisites for this course (if any)**:** **Non**
5. Co-requisites for this course (if any)**:** **Non**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	13	86.7
2	**Blended**	2	13.3
3	**E-learning**	-	-
4	**Distance learning**	-	-
5	**Other**	-	-

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	**15**
2	**Laboratory/Studio**	**30**
3	**Tutorial**	**-**
4	**Others** (specify)	**-**
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

Course Title	Course No.	Credit Units			Year	Level	Pre-Requisite
		Theoretical	Practical	Total			
Phycology	**331MIC**	**1**	**1**	**2**	**3rd**	**5th**	**None**

1) Course Objectives:
This course aims giving students the basic theoretical and practical techniques of types, structure, taxonomy, and life cycles of freshwater and marine algal organisms.

2) Course Contents:
Algal cell morphology – Algal Cell Structure – Reproduction – Motility - Classification –- Cyanophyta – Euglenophyta – Chlorophyta – Charophyta - Basillariophyta – Xanthophta – Chrysopyta – Phaeophyta – Rhodophyta.

3) Practical:

Study of representatives of different families, sample of local freshwater and marine algal organisms

4) Assessment:

Theoretical: Essay/Objective, oral, class work, research work, Exams
Practical: Identifying and collecting specimens and slides.
Theoretical: 20% marks
Practical: 30% marks
Final: 50% marks

5) Teaching Methods:

Lectures, photographs, slides, multimedia, web-based learning. Samples, slides, light microscopes, glassware, chemicals

6) Text Books:

- عبد العزيز السرانى , د. ادريس الترك , ا.د. محمد الحسينى. 2000. الطحالب , المدينة المنورة .

7) References:

- Robert, E. (2000). Phycology, Cambridge Univ. Press, Cambridge.

2. Course Main Objective

This course aims giving students the basic theoretical and practical techniques of types, structure, taxonomy, and life cycles of freshwater and marine algal organisms.

3. Course Learning Outcomes

CLOs		Aligned PLOs
Knowledge and Understanding		
K1.1	Define all principals, concepts, theories and aspects concerning with biology.	K1
K1.2	Label all drawings, diagrams, biological microscopic pictures and specimens related to biological science.	
K1.3	List all characteristics, importance, features, and steps of biological aspects.	
K2.1	Differentiate (Compare) between different mechanisms, functions, practices and aspects related to biological sciences.	K2
K2.2	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects.	
K2.3	Draw all systems, organs, cells and its contents, diagrams and figures of biological science.	
Skills		
S1.1	Debate the biological theories, principles and processes.	S1
S1.3	Examine theoretically or practically the slides, photos, diagrams or statements of biological aspects.	
S3.3	Write a report about any practical or theoretical tasks related to biological science.	S3
Values		
V2.1	Illustrate awareness of risk assessment and safety observation when dealing with lab equipment at various fields.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Algal Cell Structure, Algal Reproduction, Algal Taxonomy	1
2	Cyanophyta	1
3	Euglenophyta	1
4	Chlorophyta	2
5	Xanthophyta	2
6	Bacillariophta	2
7	Phaeophyta	2
8	Rhodophyta	2
9	Economic Importance of Algae	1
Total		14

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**		
K1 (30 marks)	K1.1	Define all principals, concepts, theories and aspects concerning with biology.	Lectures, Lab work	Quizzes, MCQs, Written exam
	K1.2	Label all drawings, diagrams, biological microscopic pictures and specimens related to biological science.	Lectures, Lab work	Quizzes, MCQs, Written exam
	K1.3	List all characteristics, importance, features, and steps of biological aspects.	Lectures, Lab work	Quizzes, MCQs, Written exam
K2 (30 marks	K2.1	Differentiate (Compare) between different mechanisms, functions, practices and aspects related to biological sciences.	Lectures	Quizzes, MCQs, Written exam
	K2.2	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects.	Lectures	Quizzes, MCQs, Written exam
	K2.3	Draw all systems, organs, cells and its contents, diagrams and figures of biological science.	Lectures, Lab	Quizzes, MCQs, Written exam
	2.0	**Skills**		
S1 (25 marks)	S1.1	Debate the biological theories, principles and processes.	Lectures, Lab work,	Quizzes, Written exam
	S1.3	Examine theoretically or practically the slides, photos, diagrams or statements of biological aspects.	Lectures, Lab work,	Quizzes, Written exam

	Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S3 (10 Marks)	S3.3	Write a report about any practical or theoretical tasks related to biological science.	Assignment & Group discussion	Web-based work & Writing Essays
	3.0	**Values**		
V2 (5 marks)	V2.1	Illustrate awareness of risk assessment and safety observation when dealing with lab equipment at various fields.	Group Discussion, web-based work, Lab work	Lab work assessment

2. Assessment Tasks for Students

#	*Assessment task	Week Due	Percentage of Total Assessment Score
1	Written assignment	3	3
2	Group assignment	4	2
3	Theoretical quiz	5	5
4	Mid-term exam	7	10
5	Practical Mid-term exam	9	10
6	Practical assignment	11	5
7	Final practical exam	13	15
8	Final Exam	15	50

***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 :
10 Office hours/Faculty/week

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	عبد العزيز السرانى , د. ادريس الترك , ا.د. محمد الحسينى. 2000. الطحالب .
Essential References Materials	**Van Den Hoek *et al.* (2010) Algae. Cambridge University Press, Cambridge, U.K.**
Electronic Materials	www.ausers.rcn.com/jkimball.ma.ultranet/BiologyPages/ www.emc.maricopa.edu www.biology.clc.uc.edu
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation Classrooms, laboratories, demonstration) (.rooms/labs, etc	1 Lecture room(s) for groups of 50 students. 1 Laboratory for group of 25 students.
Technology Resources AV, data show, Smart Board, software,) (.etc	AV, data show, Smart Boar
Other Resources Specify, e.g. if specific laboratory) equipment is required, list requirements or (attach a list	.Light microscopes, glassware, chemicals, consumables

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching	Students, Faculty	Direct (Questionnaire)
Effectiveness of assessment	Peer Reviewer	Direct (Cross Check marking)
Extent of achievement of course learning outcomes	Program Leader	Indirect (QA Committee)
Quality of learning resources	QA. Committee	Indirect (Benchmarking)

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	
Reference No.	
Date	