

Description of the Plan (Biology Program)

The student should successfully 185 credit hours before graduation.

Requirements	No. of courses	No. of credits	%
Preparatory Year	12	46	24.86
University Requirements	4	8	4.32
Compulsory Enteral Courses	24	92	49.7
Compulsory External Courses	4	18	9.72
Elective Enteral Courses	3	9	4.86
Elective External Courses	1	4	2.16
Free Course	2	6	3.24
Field Training	1	2	1.08
Total hours	52	185	100

The undergraduate study plan is distributed on the following semesters:

First Semester: (Preparatory year)

Code No.	Course Title	No. of Units	Prerequisite
Math 1050	Differential calculus	4(2.2.0)	
IC 101	Introduction to Islamic Culture	2(2.0.0)	
ENGL 1210	Reading Skills	5(2.3.0)	
ENGL 1220	Writing Skills	5(2.3.0)	
Total hours		16 (8,8,0)	

Second Semester: (Preparatory year)

Code No.	Course Title	No. of Units	Prerequisite
Math 1060	Integral Calculus	4(2.2.0)	Math 1050
ARAB 101	Language Skills	2(2.0.0)	
ENGL 1230	Listening/Speaking	5(2.3.0)	
CT 1400	Computer Skills	3(2.0.1)	
Total hours		14 (8,5,1)	

Third Semester: (Preparatory year)

Course code and number	Course Title	No. of Units	Prerequisite
PHYS 1010	General Physics (1)	5(3.1.1)	
MC 1400	Communication skills	2(2.0.0)	
ENGL 1604	English for Technical Purposes	5(4.0.1)	
ENGL 1606	English for Academic Purposes	4(2.2.0)	
Total hours		16 (11,3,2)	

Forth Semester: (Second Year)

Course code and number	Course name	No. of credits	Prerequisite
IC 102	The Islam and Society Building	2(2,0,0)	---
BIO 2010	General Biology (1)	5(4,0,1)	---
CHEM 2010	General Chemistry (1)	5(4,0,1)	---
BIO 2610	Basics of Ecology	3(3.0.0)	---
Total hours		15 (13,0,2)	

Fifth Semester: (Second Year)

Course code and number	Course name	No. of credits	Prerequisite
STAT 2060	Statistic of Biology	4(4,0,0)	
BIO -2020	General Biology (2)	5(4,0,1)	BIO 2010
BIO -2410	Microbiology	4(3,0,1)	BIO 2010
XXXX	FREE COURSE	2(2,0,0)	
Total hours		15 (13,0,2)	

Sixth Semester: (Second Year)

Course code and number	Course name	No. of credits	Prerequisite
IC 103	The Foundation of the Economic System in Islam	2(2,0,0)	
CHEM -2410	Organic chemistry (1)	5(4,0,1)	CHEM 2010
BIO -2120	Cytology	4(3,0,1)	BIO 2010
BIO 2130	Marine Biology	3(3,0,0)	BIO 2010
XXXX	FREE COURSE	2(2,0,0)	
Total hours		16 (14,0,2)	

Seventh Semester: (Third Year)

Course code and number	Course name	No. of credits	Prerequisite
IC 104	Foundations of the political system in Islam	2(2,0,0)	
BIO 3420	Virology	4(3,0,1)	BIO -2410
BIO 3210	Animal Physiology	4(3,0,1)	BIO -2020
BIO 3310	Taxonomy of flowering plants	4(3,0,1)	BIO 2010
BIO XXXX	Elective Internal course	3(3,0,0)	
Total hours		17 (14,0,3)	

Eighth Semester: (Third Year)

Course code and number	Course name	No. of credits	Prerequisite
ARAB 103	Arabic Editing	2(2,0,0)	
BIO 3220	General Entomology	4(3,0,1)	BIO- 2020
BIOCHEM -3010	General Biochemistry	4(3,0,1)	CHEM 2010
BIO 3440	Phycology	4(3,0,1)	BIO 2010
XXXX	FREE COURSE	2(2,0,0)	
Total hours		16 (13,0,3)	

Ninth Semester: (Third Year)

Course code and number	Course name	No. of credits	Prerequisite
BIO 3510	General Genetics	4(3,0,1)	BIO -2120
BIO -3430	Bacteriology	4(3,0,1)	BIO -2410
BIO 3320	Plant Physiology	4(3,0,1)	BIO- 2020

BIO XXXX	Elective Internal course	3(2,0,1)	
BIO- 4620	Pollution	3(3,0,0)	BIO 2610
Total hours		18 (14,0,4)	

Tenth Semester: (Fourth Year)

Course code and number	Course name	No. of credits	Prerequisite
BIO -4230	Embryology	4(3,0,1)	BIO 3210
BIO 4450	Mycology	4(3,0,1)	BIO -2410
BIO 4590	Field Training	2(0,0,6)	After Passing 135 Credit hrs.
BIO 4030	Ethics for biology	2(2,0,0)	
Total hours		12 (8,0,8)	

Eleventh Semester: (Fourth Year)

Course code and number	Course name	No. of credits	Prerequisite
BIO -4240	Parasitology	4(3,0,1)	BIO 3220
BIO 4520	Molecular Biology	4(3,0,1)	BIOCHEM -3010
BIO 4250	Histology and microscopic preparation	4(3,0,1)	BIO -2120
BIO XXXX	Elective Internal course	3(2,0,1)	
Total hours		15 (11,0,4)	

Twelfth Semester: (Fourth Year)

Course code and number	Course name	No. of credits	Prerequisite
BIO 4270	Immunology	4(3,0,1)	BIO 3210
PHYS XXXX	Elective External course	4(4,0,0)	PHYS 1010
BIO -4980	Research Project	3(2,0,1)	After Passing 160 Credit hrs.
BIO 4140	Flora and Fauna of K.S.A	4(3,0,1)	BIO 3310
Total hours		15 (12,0,3)	

- Field Training

Course code and number	Course name	No. of credits	Prerequisite
BIO 4590	Field Training	2(0,0,6)	After Passing 135 Credit hrs.
Total hours		2(0,0,6)	

- **Compulsory external courses: 18 credit units**

Course code and number	Course name	No. of credits	Prerequisite
STAT 2060	Statistic of Biology	4 (4,0,0)	---
CHEM 2010	General Chemistry (1)	5 (4,0,1)	---
CHEM -2410	Organic Chemistry (1)	5 (4,0,1)	CHEM 2010
BIOCHEM -3010	General Biochemistry	4 (3,0,1)	CHEM 2010
Total hours		18 (15,0,3)	

- **Elective Internal courses (inside Biology department): 9 credit units**

Course code and number	Course name	No. of credits	Prerequisite
BIO 3260	Hematology	3 (2,0,1)	BIO 3210
BIO 3530	Biotechnology	3 (2,0,1)	BIO 3510
BIO 3630	Applied Ecology	3 (3,0,0)	BIO 2610
BIO 4280	Animal Behavior	3 (2,0,1)	BIO 2010
BIO 4330	Medicinal plants	3 (2,0,1)	BIO 3310
BIO 4460	Plant Pathology	3 (2,0,1)	BIO -2410
BIO 4470	Food Microbiology	3 (2,0,1)	BIO -2410
BIO 4540	Genetic Engineering	3 (2,0,1)	BIO 3510
Total hours		24 (17,0,7)	

- **Elective External courses (outside Biology department) one from these courses: 4 credit units**

Course code and number	Course name	No. of credits	Prerequisite
PHYS 4190	Nanophysics	4 (4,0,0)	PHYS 1010
PHYS 2110	Optics (1)	4 (4,0,0)	PHYS 1010
Total hours		8 (8,0,0)	

- **Free course: 6 credit units**

Course code and number	Course Title	No. of Units	Pre-requisite	Co-requisite
	Free (inside or outside the faculty)	6		

- **Service courses:**

The courses offered by the department to other departments inside and outside the college.

Course code and number	Course name	No. of credits	Remarks
BIO 106	General Biology for health college program	5 (4,0,1)	
BIO 2010	General biology (1) for Chemistry students	5 (4,0,1)	
BIO -2410	General microbiology for Chemistry students	4 (3,0,1)	BIO 2010
BIO 2410	Animal physiology for chemistry students	4 (3,0,1)	BIO 2010