

Second year		Fourth Level			
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
BIOL204	General Biology	4.5	3	6	-
STAT211	Applied Statistics	3	3	4.5	-
ENGL210	English for Scientific Communication	4.5	0	4.5	-
<b>Total Units</b>		15			

Fifth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
CHEM203	General Chemistry I	4.5	3	6	-
BIOL206	Cell Biology	3	3	4.5	BIOL204
BIOL207	Basics of Ecology	3	3	4.5	BIOL204
<b>Total Units</b>		15			

Sixth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
MATH201	Calculus I	6	0	6	-
PHYS202	Physics I	4.5	3	6	-
CHEM212	Organic Chemistry	3	3	4.5	CHEM203
<b>Total Units</b>		16.5			

Third year		Seventh Level			
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
ZOOL301	Vertebrates Biology	3	3	4.5	BIOL204
GENTC304	Principles of Genetics	3	3	4.5	BIOL206
BOTNY303	Plant Morphogenesis	3	3	4.5	BIOL206
BIOCH308	Biochemistry	3	3	4.5	CHEM212
<b>Total Units</b>		18			

Eighth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
ZOOL302	General Entomology	3	3	4.5	BIOL204
BOTNY306	Plant Physiology	3	3	4.5	BIOCH308
COMP209	Introduction to Programming	3	3	4.5	-
<b>Total Units</b>		13.5			

Ninth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
ZOOL305	Animal Physiology	3	3	4.5	ZOOL301
MICRO307	Microbiology	3	3	4.5	BIOL204
GENTC308	Molecular Biology	3	3	4.5	BIOCH308-GENTC304
<b>Total Units</b>		13.5			

شروط التخصيص بالمسارات اجتياز 120 ساعة معتمدة

	University Requirement		Track Requirement
	College Requirement		Elective Requirement
	Program Requirement		Summer training

Program Name: Biology TRACK Name: Microbiology Program year: (2016)

Fourth year		Tenth Level			
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
MICRO 409	Bacteriology	3	3	4.5	MICRO 307
MICRO 410	Mycology	3	3	4.5	MICRO 307
BIOL 414	Environmental Toxicology	3	3	4.5	BIOL 207
ISLM271	Islamic Creed	3	0	3	-
<b>Total Units</b>		16.5			

Eleventh Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
MICRO 413	Micr. of Petroleum & Minerals	3	0	3	MICRO 307
MICRO 423	Algae	3	3	4.5	MICRO 410
MICRO 424	Virology	3	0	3	MICRO 409
ENGL 381	Oral Skills for Scientific English	4.5	0	4.5	MICRO 307
<b>Total Units</b>		15			

Twelfth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
BIOL 401	Bioinformatics	1.5	3	3	STAT211- GENTC 308
MICRO 422	Applied Microbiology	3	3	4.5	MICRO409-MICRO 410
BOTNY 415	Plant Stress	3	3	4.5	BOTNY 306
ISLM272	Social system in islam	3	0	3	-
<b>Total Units</b>		15			

Summer Training BIOL426 3 Cr. Recement: Pass 150 Cr.

Fifth year		Thirteenth Level			
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
PARA 412	Foundations of Parasitology	3	3	4.5	ZOOL 302
BIOL411	Ecosystem of Arab Gulf	3	3	4.5	BIOL 207
IMMUN 407	Immunology	3	0	3	MICRO 307
ISLM273	Economic system in Islam	3	0	3	-
<b>Total Units</b>		15			

Fourteenth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
GENTC 420	Gene Regulation	3	0	3	GENTC 308
BIOL 504	Graduation Research Process	3	0	3	PASS Level 12
XXX	Elective from list A	3	3	4.5	
XXX	Elective from List A	3-1.5	0-3	3	
<b>Total Units</b>		13.5			

Fifteenth Level					
Course No.	Course Name	Lec	Lab	Cr. Hr.	Pre-request
MICRO 508	Medical Microbiology	3	0	3	MICRO 424
XXX	Elective. from list B	3	3	4.5	
XXX	Elective from list B	3	0	3	
XXX	Elective from list B	1.53-	0-3	3	
ISLM274	Political system in Islam	3	0	3	-
<b>Total Units</b>		16.5			

	University Requirement		Track Requirement
	College Requirement		Elective Requirement
	Program Requirement		Summer training

Program Name: Biology TRACK Name: Microbiology Program year: (2016)

The student must pass (2) elective courses from list A with 7.5 credit hours, and minimum of (3) elective courses from list A with 10.5 credit hours

Elective Courses (List A)						
Course No.	Course Name	Lec	Lab	Cr. Hr	Study Levels	Pre-request
ZOOL 550	Insect Biology & Control	3	3	4.5	14 <sup>th</sup>	ZOOL 302
BIOL 406	Forensic Biology	3	3	4.5	14 <sup>th</sup>	MICRO307-ZOOL 302
MICRO 462	Microbial Antibiotic Resistance	3	0	3	14 <sup>th</sup>	MICRO 307
BIOL 454	Ecology and Control of Vector-Borne Diseases	3	3	4.5	14 <sup>th</sup>	-
CHEM 516	Bioanalytical Chemistry	1.5	3	3	14 <sup>th</sup>	CHEM 203
Elective Courses (List B)						
BIOL 564	Bioremediation of pollutants	3	0	3	15 <sup>th</sup>	MICRO 307- CHEM212
BIOL 505	Molecular Microbiology & Biotechnology	3	3	4.5	15 <sup>th</sup>	-
GENTC 502	Genetic Engineering	3	3	4.5	15 <sup>th</sup>	GENTC 308
ZOOL 552	Medical Entomology	3	3	4.5	15 <sup>th</sup>	ZOOL 302
GENTC 557	Medical Molecular Genetics	3	0	3	15 <sup>th</sup>	-
BIOL 563	Water Quality & Sanitation	1.5	3	3	15 <sup>th</sup>	MICRO 307

	University Requirement		Track Requirement
	College Requirement		Elective Requirement
	Program Requirement		Summer training