



وكالة الجامعة للشؤون التعليمية  
البرامج الدراسية والتطوير

( 5 )

مختصر توصيف

(Course Syllabus)

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	BIOL-351	:
	بيولوجيا الخلية BIOL-111	:
	-	:
		:
	3	:
<b>Module Title:</b>	Genetics	
<b>Module ID:</b>	BIOL-351	
<b>Prerequisite (Co-requisite) :</b>	Cell biology, BIOL-111	
<b>Co-requisite :</b>	-	
<b>Course Level:</b>	5 <sup>th</sup>	
<b>Credit Hours:</b>	3	

:(Course Information) \*

### Module Description

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This course introduces the basic knowledge of Genetics, it covers the basic concepts of Genetics, the applications of Genetics in the different life aspects, it also will cover the different theories of genetics developments and its branches.

### Module Aims

أهداف المقرر :

1	Introduce the basic knowledges of genetics	1
2	Acquire basic skills in genetics	2
3	Self-education and continuing skills shows improvement	3
4	Communicate properly with quantitative genetic concepts	4
5	Public perception of what is happening around the world in the development of quantitative genetics	5

**Learning Outcomes:**
**مخرجات التعليم:**

1	Familiarity with modern facilities to improve the genetic strains	1
2	Understanding the different biological systems inside the cell	2
3	The use of genetic concept in the development of agriculture and livestock production and environmental preservation	3
4	Understanding the different theories of Genetics and its application	4
5	Forecasting the future of some of the genetic systems within the surrounding environment	5

**Course :**
**Contents:**

ساعات التدريس (Hours)	الأسابيع (Weeks)	(Subjects)
3	1	Introduction to Genetics
6	2	Theories in Genetics
3	1	Selection theories
6	2	Mutation
3	1	Cloning
6	2	Models of Population genetic
3	1	DNA Replication
3	1	Gene expression
9	3	Transmission and quantitative genetics The law of segregation Different mode of inheritance Genetic problems The Law of segregation The dihybrid cross Genetic problems Polygenes: Quantitative inheritance
6	2	Sex related inheritance: X linked genes Sex influenced Inheritance Sex limited inheritance

**Textbook and References:**
**:**

ISBN	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Textbook title
1051	1968	Cairo- Dar elmaaref	AbdElazeem tantawy	Principles of Quantitative genetics
ISBN	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Reference
9788126510436	1985	Wiley- India	Gardner	Principles of Genetics

