

DEPARTMENT OF ZOOLOGY

ZOO 352

Syllabus, Spring 2022

Course Designation	Zoo-352	352 حين	رقم المقرر ورمزه
Course Name	Principle of Genetics	اساسيات علم الوراثة	اسم المقرر
No. of Credits	2 (1 + 1)	2 (1 + 1)	عدد الوحدات الدراسية المعتمدة
Prerequisites	None	لا يوجد	متطلب سابق
Co-requisite Course	None	لا يوجد	متطلب مصاحب

Dr. Nouf Alyami

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Office hours: By appointment and online, I am available in my office on Sunday from 8 -8:50 am and Wednesday from 12:00 till 2:50 pm. Also, on Thursday from 9 till 9:50 and 12 till 12:50 pm.

Lecture time and location

Sunday 10:00-10:50am in-person. **If you are more than 10min late without prior notice, then please do not come into class.** If you are scheduled to give a presentation, please be there and ready before lecture time as tardiness will not be excused.

Course Description:

Introductions to genetics, the relation between genes and traits. Genetics is an experiments science. The chromosomal basis of inheritance, chromosomes cell cycle and mitosis, meiosis, and chromosome theory, Mendelian inheritance and its extensions Non-Mendelian inheritance, Mutations, Mechanisms of DNA repair and sex-determination in eukaryotes. introduction to genetic engineering and its applications.

Class materials

The majority of the material from this course will be from PowerPoints (**Principles of genetics / D. Peter Snustad**) and YouTube videos. Links to these sources and the PDF files can also be downloaded from Blackboard.

<https://access.library.ksu.edu.sa/>

Blackboard:

The syllabus for the course, lecture notes, assignment instructions, primary literature assignments and grading keys/rubrics will be available via the KSU Blackboard site at: <https://lms.ksu.edu.sa/webapps/login/?action=relogin>

The grading for this course will be as follows:

30 points practical

5 Quiz (MCQ)

10 points written assignments (two)

15 points Midterm

40 points Final examination

Absence from class will count against your class participation grade unless the absence is excused by the instructor and did not exceed 25%.

Academic misconduct:

Academic misconduct of any kind will not be tolerated in any course taught by Dr. Alyami. Any incidence of academic misconduct will be reported to the Department head and will be reflected in your grade.

Plagiarism is a special kind of academic dishonesty in which one person steals another person's ideas or words and falsely presents them as the plagiarist's own product. This is most likely to occur in the following ways:

- Using the exact language of someone else without the use of quotation marks and without giving proper credit to the author
- Presenting the sequence of ideas or arranging the material of someone else even though such is expressed in one's own words, without giving appropriate acknowledgment. Submitting a document written by someone else but representing it as one's own”.

Syllabus:

Week no.	Date	List of Topics	Activity
1	1/16/2022	1. Genetics overview	
2	1/23/2022	2. Genetics overview	
3	1/30/2022	3. Chromosomes	
4	2/6/2022	4. The cell cycle and its checkpoint	
5	2/13/2022	5. Mitosis, and 6. Meiosis	Written Assignments no.1
6	2/20/2022	7. The inheritance of gender	
7	2/27/2022	8. Mutations and Gene expression	
9	3/13/2022	SPRING BREAK	5 Point Quize (MCQ)
10	3/20/2022	Exam 1	
11	3/27/2022	9. Transcription and Translation	
12	4/3/2022	10. Mendelian Genetics	
13	4/10/2022	11. Exceptions of Mendelian Law	
14	4/17/2022	12. Mutation and DNA repair	
15	12/12/2021	13. Epigenetics and Genetic engineering	Written Assignments no.2
		Final exam on edugate	