



Lecture 1:

General Introduction

Course 371

AIMS

- You and I.
- What is this class all about?
 - Class webpage.
 - Textbook, readings.
 - Attendance.
 - Lecturing style.
 - exams and questions' style.
- Some Biology 😊:
 - The molecules

Who am I?

- My name is Hasan Alhaddad.
- Ph.D. in Genetics from UC Davis.
- Studied insects and cats and does population and evolutionary genetics for fun.
- I love science and I like to share this love with everybody especially you.



Where you find me?

My office is room 101

When you find me?

- My office hours: By appointment.
- My email is:
 - hassan.alhaddad@ku.edu.kw
 - hhalhaddad@gmail.com

Who are you?

State your name

Class Material and Announcements

hagenetics.org

Class Material and Announcements

Hasan Alhaddad Genetics Lab

Search



- People
- Research
- PPPs
- Teaching**
- Jamalid Report
- E.H.R.A.B
- 899km
- Blog

Class Material and Announcements

Hasan Alhaddad Genetics Lab



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CATEGORY ARCHIVES: INTRO. MOL.

- Intro. Mol. Bio (281)
- Intro. Mol. Genetics (371)**
- Mol. Evo (410)
- Intro Genomics (485)

Material and announcements for

Genetics will be posted here



Class Material and Announcements

Introduction to Molecular Genetics (371)

Posted on [April 5, 2015](#) by [Hasan](#)

Class time and location

MW – 11:00-12:15 (SCI-S C2 Room 123)

Textbook, readings, and lecturing style:

Molecular Biology of the Gene. 6th edition, by Watson et al.

The lectures will be given using powerpoint slides (see below). It is **YOUR RESPONSIBILITY** to print the material, come to the lectures, and take notes. You will be tested on the material I give in class and the book.

Attendance:

I will not give points for attending my lectures. You are a **RESPONSIBLE** student and you want to learn. Missing lectures will significantly affect your performance and grade. I do not intend to give lectures during my office hours or photocopy my lecture notes for you!

Academic dishonesty:

DO NOT CHEAT. You are smart and you can get the grade you want. Academic dishonesty will not be tolerated.



Class Material and Announcements

Lecture 1: General Introduction ([371_Lec1](#))

Lecture 2: Model organisms ([371_Lec2](#))

Lecture 3: Laws of inheritance ([371_Lec3](#))

Lecture 4: Mendel's monohybrid experiments ([371_Lec4](#))

Video: [How Mendel's pea plants helped us understand genetics?](#) – Thanks Fatemah Sadeq

Lecture 5: Mendel's dihybrid experiments ([371_Lec5](#))

Lecture 6: The location and identity of the genetic material ([371_Lec6](#))

Lecture 7: The identity of the genetic material ([371_Lec7](#))

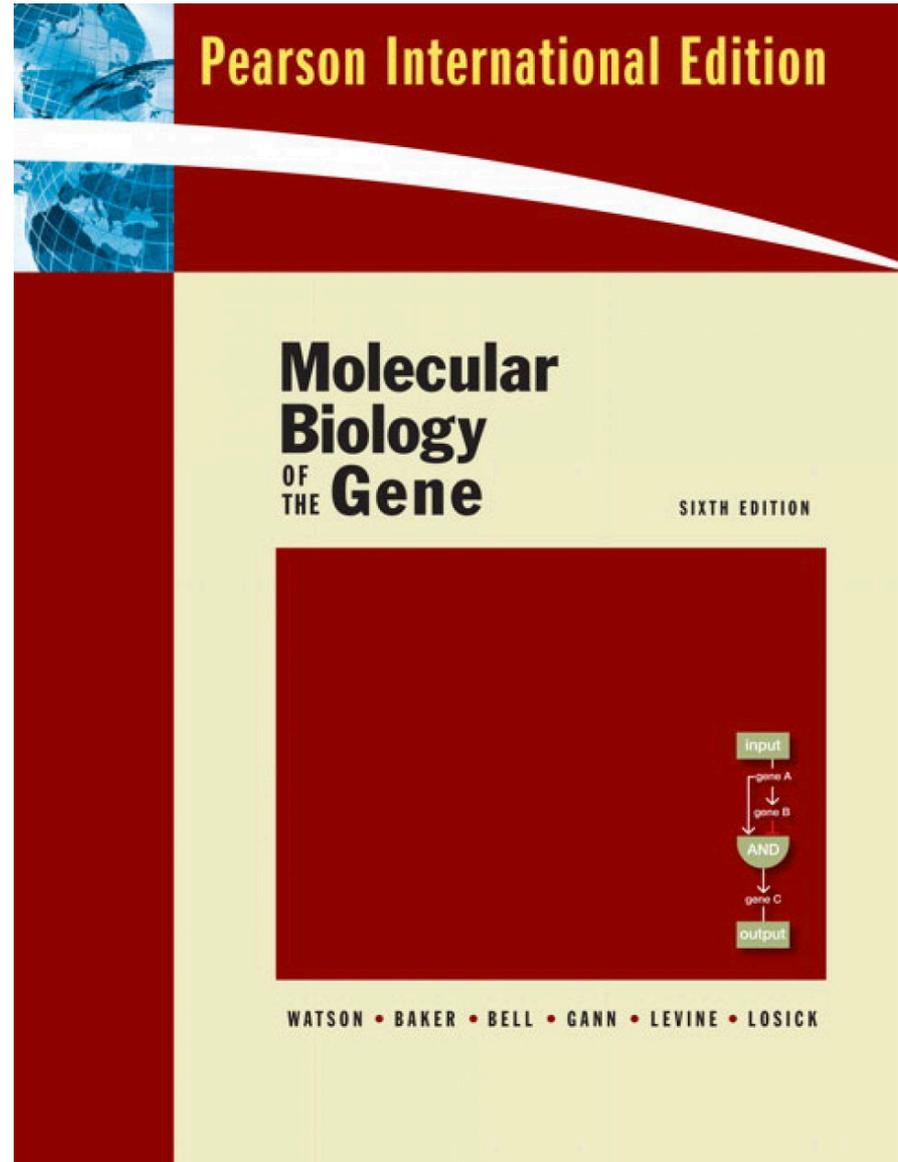
Lecture 8: The chemical composition of the genetic material ([371_Lec8](#))

Video: [DNA building blocks](#)

Video: [The structure of DNA](#) – Thanks to Asmaa Alghanem

Assigned Textbook

- Buying and reading the book is your responsibility.
- Please **DON'T** ask me if you need the book.

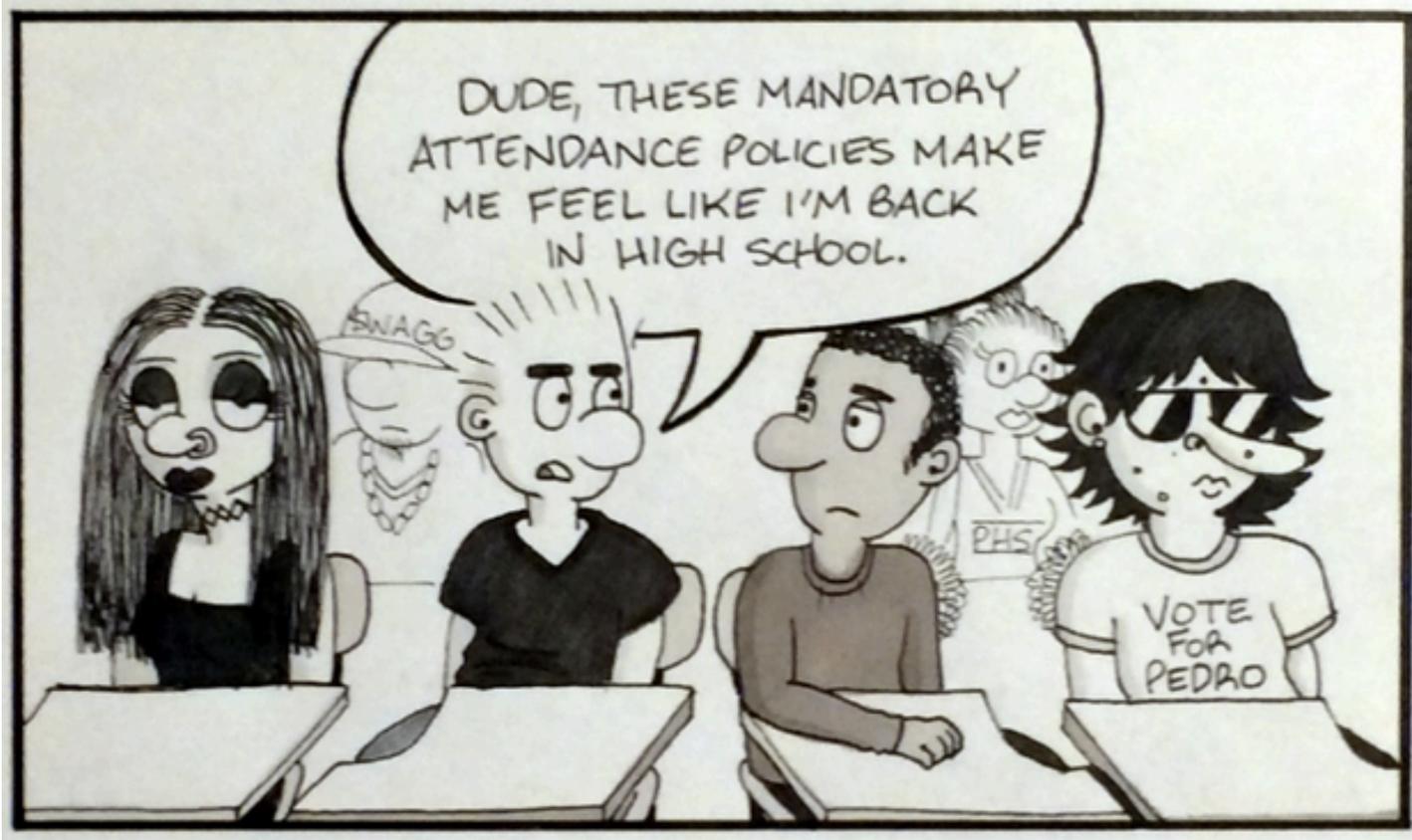


Lecturing Style

- You will be **RESPONSIBLE** for the chapters' readings.
- I may use material that is not included in the book. Make sure you follow me in the class.
- My powerpoint slides will be uploaded to class webpage (check table). It is **YOUR JOB** to print them and take notes during my lecture.
- There are no stupid questions. So ask me and do not get lost.

Attendance

- I **DON'T** take attendance. You are a responsible student and you want to learn. No points only for showing up!



Testing style

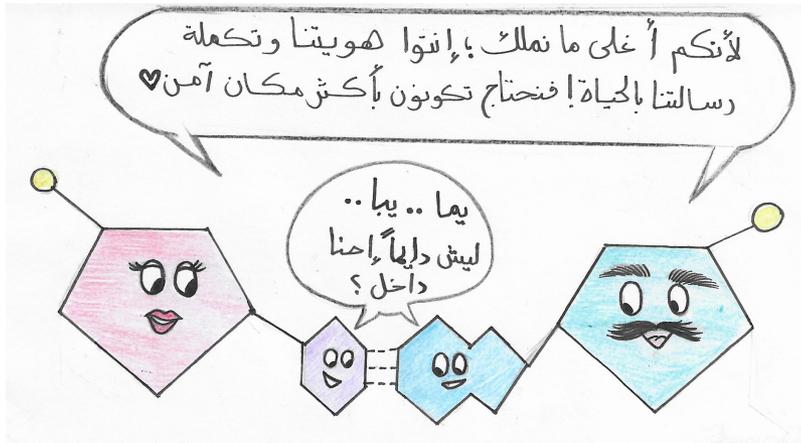
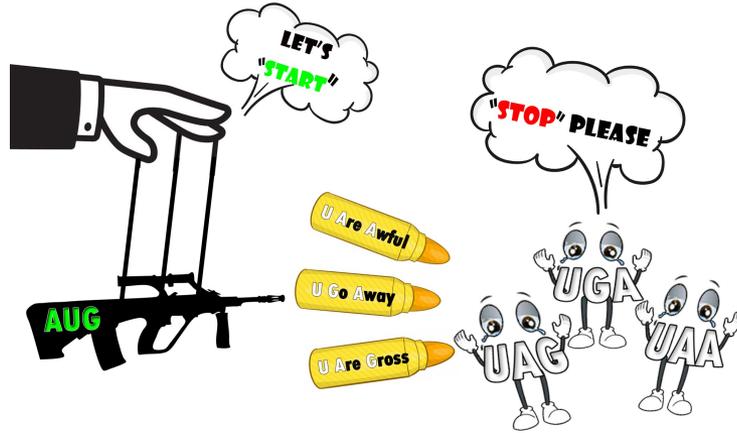
- My exams are composed of multiple choice exams.
- Questions vary in difficulty.
- Exams dates are fixed (see syllabus).
- I **WILL NOT** change the dates of the exams.
- If study and read the questions carefully, you can get a full mark.

Grade distribution

Test 1	30%	} The lowest score will be dropped !	60%
Test 2	30%		
Test 3	30%		
Final Exam	Cumulative Final !		40%
	Total		100%

Bonus

You can earn up to 5 points for your creative work and academic seriousness



قراءة تسلسل الجينوم

ماكسأم و قلبرتُ معاً
عَدَل على البيز بِلَا
و سانقرُ كاللومينا طريقةً
ما إن أخذتُ صورةً لهُ
والبايروفوسفيتُ هناك
كذا التورينتُ سهلٌ واضحٌ
أما السوليد فعندهُ
و إن أردتُ شيئاً أسهلاً
اكشفا طريقةً قد تُعملُ
تردُّدٍ و اقطعهُ أينما تُعدَلُ
لكنما في اللومينا يكتَمِلُ
أبعدُ الليلِ كي يسترسَلُ
دلالةً عليه ضوءٌ مُشعلُ
تغيُّرُ ال pH قد يُسجَلُ
برايمرُ بطبعه يونيفيرسَلُ
فالنانوبور عن غيره مفضلُ

- زينب أحمد محمد

Bonus

You can earn up to 5 points for your creative work and academic seriousness

Mariam Ahmed Youstri (281)

* Once upon a time, an Adenine said "I want to marry U in RNA"

* How we reach other doesn't matter. The beginning and the end are what really matters (the meaning of Δ)

* كل عقدة ولها حلال. وكل (Nucleic acid) وله (Polymerase)

* خالتي وخالتيك واتفرقوا الخالات، وال (leading template strand) وال (lagging template strand) واتفرقوا ال (strands)

* إن سرقت اسرق جمل، وإن عشقت اعشق قمر، وإن عملت (mutation) اعلم (deletion)

مريم احمد شقير (٢٨١)

كلمة ورد غطاها بين ال (DNA) وال (RNA) كلمة
(RNA): عاوزه اخذ نسخه من صفحة من كتابك
(DNA): اللي عاوزني يجيني انا مبروحش لحد

وضحة العازمي (٢٨١)

طنجرة ولقت غطاها مثل الجوانين واليسيتوسين

ايام الهاجري (٢٨١)

لو جريت جري الوحوش غير (your genes) ما تحوش

سيارة خالد العجمي (٢٨١)

ما اردى من المربوط إلا المفتل وما اردى من (Rho independent termination) إلا (Rho dependent termination)

هاجر فالح الهاجري (٢٨١)

في حياتك لا تسمح لاحد يخرب سعادتك، خلك مثل (DNA Pol I) كل ما صاف (wrong nucleotide) طرده من طريقه

فاطمة صباح مجيد (٢٨١)

غصيت فيك يا ماي شدفك في، مثل ال (Hairpin loop) مع ال (RNA polymerase)

نور عدنان الصالح (٢٨١)

إذا ياكم الطارش صيدوه وإذا ياكم (the correct nucleotide) صيدوه

سيارة السريع (٢٨١)

لو جريت جري الوحوش غير رزقك ما تحوش
ولو ترجمت كل الحروف غير الجينوم ما تشوف

Hanan Mohammed Alshuraian (281)

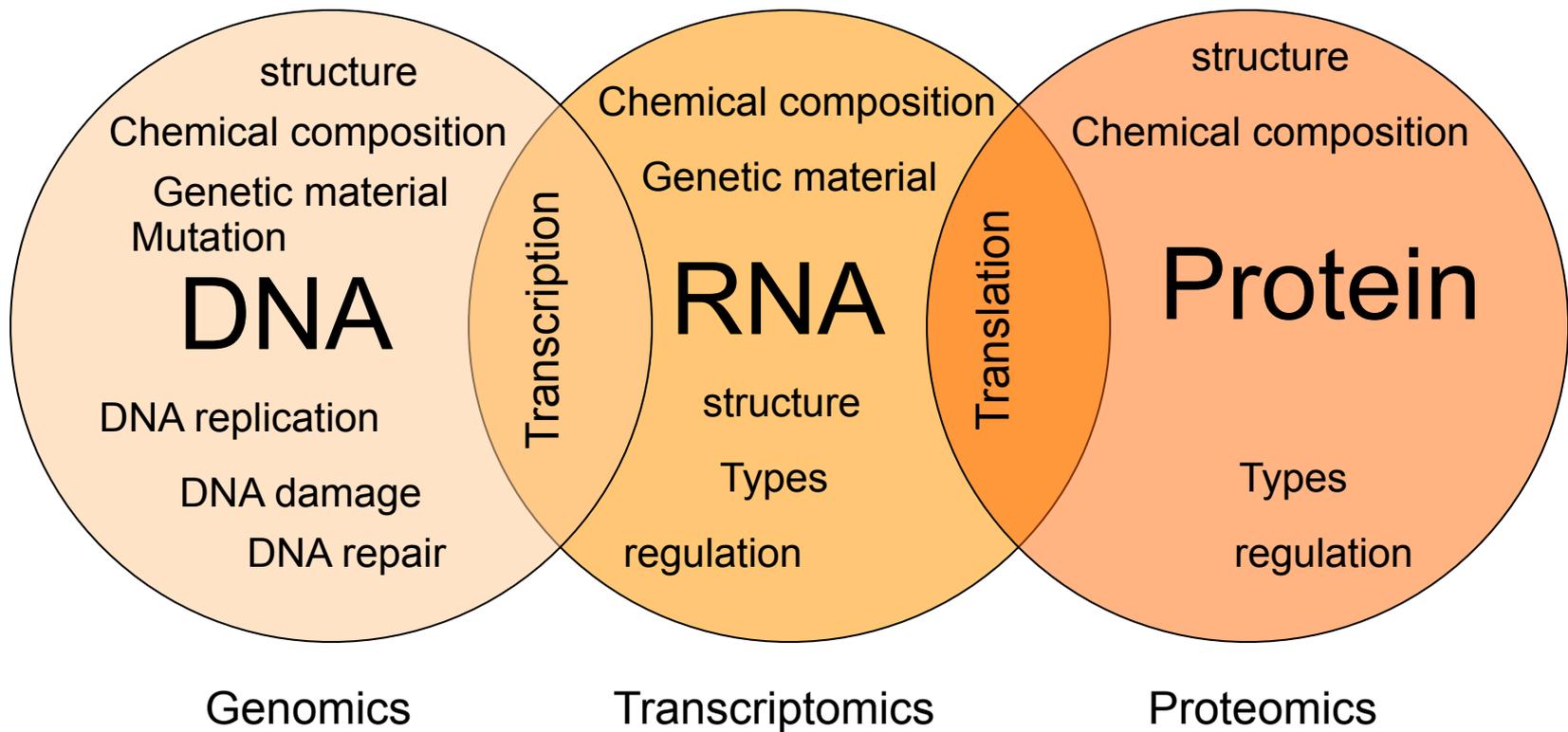
لي طاح الجمل كثرت سكاكينه
ولي طاح ال (DNA) كثرت تطافيره (mutations)

حسين خزعل (٢٨١)

كويتي يسأل صاحبه المصري: شنو يعني (DNA)
قال له: اختصار ل دي نتيجة اهلك

About the course

This class is about the molecules of life !



Expectations

- You know me, my office location, my contacts and that my job is to teach and help you.
- You understand your rights and responsibilities.
- You understand my lecturing style, my exams format, and grading system.
- You know it is going to be a fun learning experience.
- You have a general idea about the molecules of life.

For a smile

WOW, A GRADE
ABOVE 100.
HOW COOL.
GLAD I PUT IN
THE EXTRA EFFORT.



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