

# AIMS

- You and I.
- What is the class all about?
  - Class webpage and lectures.
  - Textbook and readings.
  - Attendance.
  - Lecturing style.
  - Exams and questions' style.
  - Grade distribution.
  - Project details.

# 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: TBA.

- My email is:
  - <u>hassan.alhaddad@ku.edu.kw</u>
  - <u>hhalhaddad@gmail.com</u>

 If you cannot make it to office hours, email me and we can arrange an alternative time.

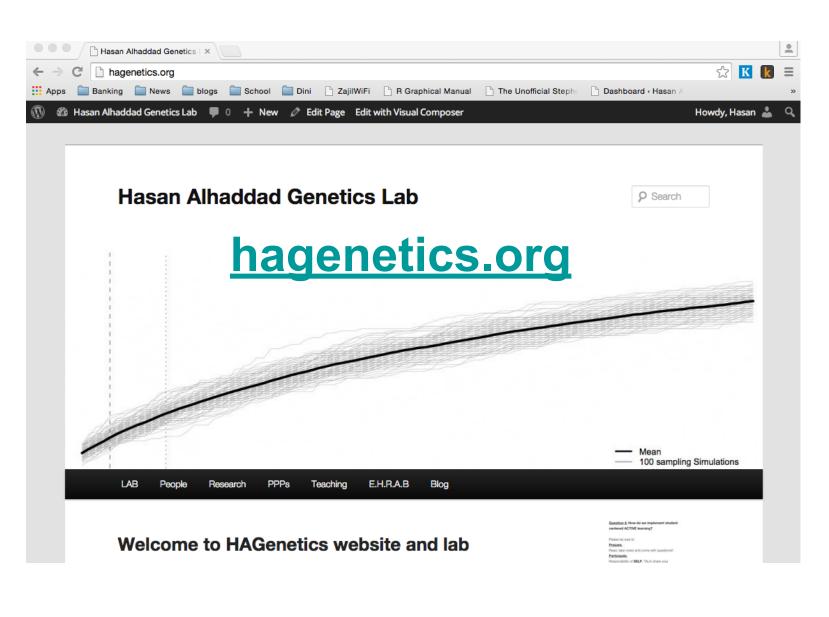


# Who are you?

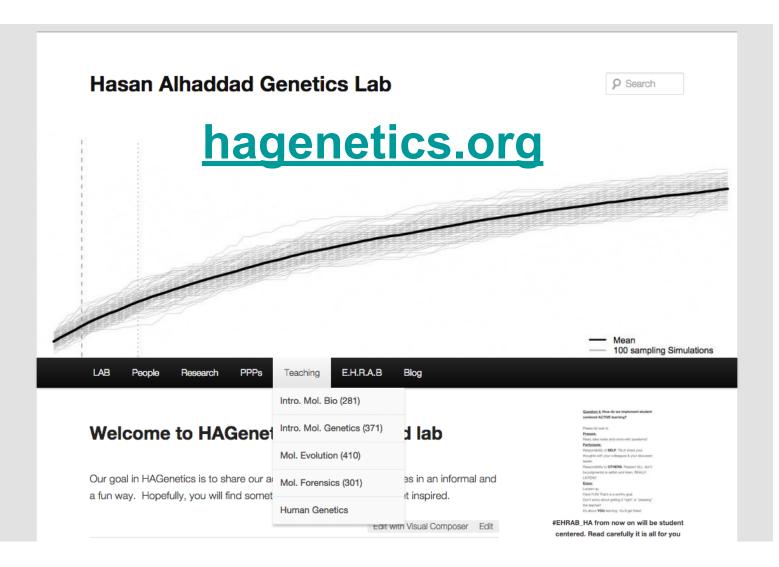
# State your name



# **Class Material and Announcements**



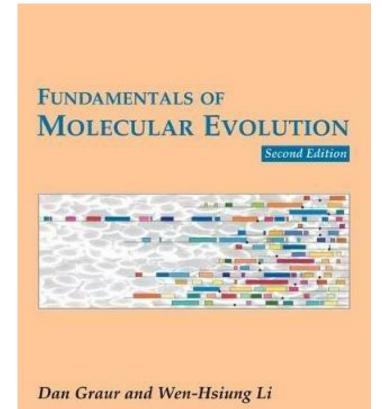
# **Class Material and Announcements**



# **Assigned Textbook**

• Buying and reading the book is your responsibility.

 Please <u>DON'T</u> ask me if you need the book.

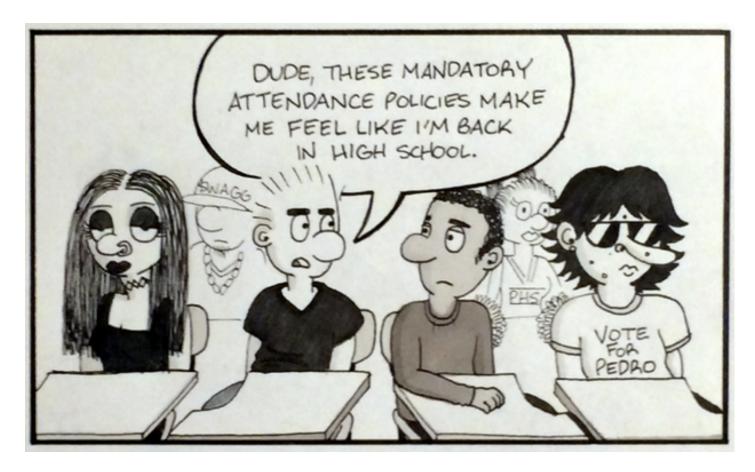


# Lecturing Style

- 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 and check webpage frequently.
- My powerpoint slides will be uploaded to class webpage (check table). It is <u>YOUR JOB</u> 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**

- Short answer and assay questions.
- Questions vary in difficulty.
- Exams dates are fixed (see syllabus).
- I <u>WILL NOT</u> change the dates of the exams.

# **Your Project**

• You will be presenting your findings in oral presentation at the end of the semester (worth 20% of your grade).

• DO NOT PANIC.

 I will guide you to make your presentation a fun 15 min experience.

# About the course

### Molecular Biology

dominant trans segregation splicing bp nucleotide U mRNA P haploid H2B Mendelianism Mendel's first law G insertion transversion double helix gene substitution tRNA parental generation alpha helix DNA loci Mendel's second law biallelic co-dominant H4 Gb F1 proteome transition replication discrete rRNA Mendel RNA transcription F2 filial generation genotype homozygous histone heterozygous gene expression amino acid protein chromosome H3 Mb Beta sheet deletion phenotype epigenetics multi-allelic translation promoter A recessive chromatin exon mutation diploid H2A intron С т genome motif Kb locus polyploidy transcriptome cis

neo-darwinism selection Fis phylogeny р survival biochemical traits 2N phlyogenetics Darwinism allopatric speciation variation generation population structure adaptation variance N different by state continous fitness migration morphology visual traits genetic drift polymorphism 2pg Population Darwin reproduction allele Genetics sympatric speciation genotype frequency hybridization Ne allele frequency recombination rate pangenesis inbreeding depression identical by state q taxonomy species Inbreeding LD immigration Wright monomorphic blending inheritance mutation rate Fisher Fst natural selection continuous, mutation speciation isolation population

**Evolutionary biology** 

# 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, your project, and my grading system.
- You know it is going to be a fun learning experience.

# Disclaimer

Figures, photos, and graphs in my lectures are collected using google searches. I do not claim to have personally produced the material (except for some). I do cite only articles or books used. I thank all owners of the visual aid that I use and apologize for not citing each individual item. If anybody finds the inclusion of their material in my lectures a violation of their copy rights, please contact me via email.

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