

LECTURE SCHEDULE - VERSION #3. MAKE SURE TO USE THE LATEST VERSION OF THIS SCHEDULE

Important Note 1 . We strongly recommend the following as soon as possible: a) View the **Voicethread** (Vt) called **The Road to Success**, b) Post your **picture** and a **comment** in the final Vt slide, c) Review the **Blackboard** (BB), **Syllabus**, **Rubric** and **Zoom videoconferencing** (useful for office hours consultations, course reviews and collaboration) d) Go to **Before You Start** on your BB and follow the instructions, e) For extra points, **screen capture** and submit before 2/9 (the last day to drop for 50% refund) any photo on Zoom that includes you, as evidence of your successful access to the **Zoom videoconference** room, and of your ability to do screen capture. e) Use the **workflow charts only to guide** your preparation, f) Read **chapter 1** from the textbook.

Important Note 2 . All homework assignments are due by exactly 11:59 **AM** one week after the date they were assigned (For example, HW assigned on Tuesday 2/4 is due on Tuesday 2/11 at 11:59 **AM**). Submit homework electronically on the Blackboard (BB). You may revise and resubmit before 11:59 **AM** on the due date. Late submission (up to 24h) will be allowed with 50% points deducted. After that, the submission link on the BB will be closed. **The content of questions may vary slightly from one student to another and assigned randomly.**

Date	Lesson #		Topic
1/28	1	Q1	From Mendel to Church: The Evolution and Impact of Genomics
2/4	2	HW1	Classical Genetics (Chs 3, 4): Pedigrees and Probability (Chs 3, 15)
2/11	3	Q2	DNA Structure (Chs 5, 6) and Replication (Ch 7), PCR (Ch 18 , Ch 21.p345). Central Dogma; Tutorial: NCBI Nucleotide.
2/18	4	HW2	Gene Expression I: Transcription and Its Regulation (Chs 9,11). Translation (Ch 10). Tutorial: PDB
2/25	5	Q3	Gene Expression II: Epigenetics (Ch 4.p70, Ch 11).
3/3	Review 1		There will be 2 Online Zoom Review 1:10 OR 7:00 PM. Participation is recommended but not required. You need a computer with a working camera to attend. Please use ear buds, especially if you are joining from a public space.
3/10	Exam 1		Time and Location TBD. PCs Provided
3/17	6	HW 3	Next Generation Sequencing (NGS); Expression Analysis by RNA sequencing; Single Nucleotide Polymorphisms (SNPs) and Genome Wide Association Studies (GWAS). (Ch 12) Tutorial: Ensembl
3/24	7	Q4	Genomics and Human Disease (Parkinson's) Familial Genetics, Chromosomal abnormalities, Cancer, Precision Medicine (Chs. 13, 16), Tutorial: OMIM
3/31			CUNY Recalibration Period
4/7			Wed Schedule
4/14	8	HW 4	Genethics (Ch 20);Eugenics, Forensics, Phenotyping, Gene Editing- Ch. 20
4/21	9	Q5	Metagenomics and Microbiome
4/28	10	HW 5	Origin of Life, Human Origin And Migrations, Tutorial: BLAST
5/5	11	Q6	Phylogeny, Evolution and Extinctions. Tutorial: Clustal Omega, Tree Dyn
5/12	Review 2		There will be 2 Online Zoom Review 1:10 OR 7:00 PM. Participation is recommended but not required. You need a computer with a working camera to attend. Please use ear buds, especially if you are joining from a public space.
5/19	Exam 2		Time and Location TBD. PCs Provided