

**Lab Schedule Winter Semester 2019. 80 min 140 min**

<b>Lab</b>	<b>Date</b>	<b>#</b>	<b>Content</b>
1	9/3	2-3	Onion tip mitosis, Anther meiosis
2	9/5	2-3	Human Barr bodies
3	9/10	1	Meet the fly. Set up epistasis crosses
4	9/12	4	Polytene chromosome squashes
5	9/17	6	Monohybrid and dihybrid crosses in maize. Chi square tests.
		4	Remove adults from epistasis crosses
6	9/19	5	Design mapping experiments for unknown mutations
7	9/24	5	Set up mapping crosses for unknown mutations
8	9/26	4	Observe epistasis F1 offspring, set up F2 crosses.
9	10/1	7	Neurospora, mapping to centromere.
		5	Remove adults from mapping of unknown mutations
10	10/3	5	Inspect mapping F1. Identify X linkage. Set up F2.
		4	Remove adults from F2 epistasis crosses
11	10/8	9	Prepare plasmid DNA
12	10/10	9	Digest plasmid DNA
		5	Remove adults from F2 mapping cross
		4	Inspect epistasis F2 offspring
13	10/15	9	Run plasmid DNA on gel. Generate plasmid map
14	10/17	8	Extract DNA from flies.
		5	Inspect F2 offspring from mapping of mutations.
15	10/22	13	PCR genomic DNA for cloning
16	10/24	13	Clean up PCR product, rapid cloning
17	10/29	10	Digest genomic DNA for inverse PCR
		13	Transform cells for rapid cloning
18	10/31	10	Ligate genomic DNA for inverse PCR
		13	Miniprep colonies from rapid cloning
19	11/5	13	Run miniprep DNA on gel
20	11/7	10	PCR ligated genomic template
		13	Prepare miniprep DNA for sequencing
21	11/12	10	Set mating between UAS <sub>gal</sub> -GFP and GAL4 drivers
22	11/14	10	Run inverse PCR products on gel, clean up for sequencing
23	11/19	14	Examine GFP-expressing flies.
24	11/21	10,13	Analyze sequenced PCR products and plasmids
25	11/26	12	Forensics lab. Extract human DNA. VNTR PCR
26	12/3	12	Run VNTR PCR products on gel
27	12/5		Lab Final