

Genetics 564			SPRING 2024
Date	Location	Notes	Topics Covered
January 23rd, 2024	Animal Sciences 150		Intro to Course & Semester Long Project Overview <b>LAB1:</b> Website Creation, Biorender, & Entrez
January 25th, 2024	Genetics 1408		"Slide evolution" talk by Ahna
January 30th, 2024	Animal Sciences 150		<b>LAB2:</b> Entrez, Homologene, Biorender + <b>Work on Website &amp; Presentation</b>
February 1st, 2024	Genetics 1408		Next generation Sequencing
February 6th, 2024	Animal Sciences 150		<b>LAB3:</b> Homologene/ENSEMBLE & <b>Specific Aims Day 1</b>
February 8th, 2024	Genetics 1408		Phylogenomics
February 13th, 2024	Animal Sciences 150	<b>Specific Aims Homework #1 (20pts) due</b>	<b>LAB4:</b> ClustalW, TreeBuilding, MEGA <b>Specific Aims Day 2 (20pts)</b>
February 15th, 2024	Genetics 1408		Domain, Motif and Gene Ontology Analysis
February 20th, 2024	Animal Sciences 150	<b>WebPage #1 due: Homepage w/Intro (20pts)</b>	<b>LAB5:</b> GO, PFAM, SMART & Protein Domain Slide
February 22nd, 2024	Genetics 1408		Genome-wide CRISPR screens
February 27th, 2024	Animal Sciences 150		<b>LAB6:</b> Model Organism Databases & <b>Work on Presentation (Q1)</b>
February 29th, 2024	Genetics 1408	<i>Rough draft #1 of presentation due (20pts), Visualize your AIMS</i>	Single Cell Transcriptomics
March 5th, 2024	Animal Sciences 150		<b>LAB7:</b> Gene Expression Omnibus (GEO) & <b>Specific Aims Group Work</b>
March 7th 2024	Genetics 1408		Chemical genomics
March 12th 2024	Animal Sciences 150	<b>Specific Aims Draft #1: Background/Gap + Aim 1-2 Due (100pts)</b>	<b>LAB8:</b> PubChem & & Specific Aims Day 3 (40pts)
March 14th, 2024	Genetics 1408	<b>Adam Steinberg will talk</b>	<b>SPECIAL LAB in 1408:</b> Bring aims and draft of presentation to class today on laptops, sit next to peer
March 19th, 2024	Animal Sciences 150		<b>LAB9:</b> Creating Interaction Networks I & Presentation Group work
March 21st, 2024	Genetics 1408	<i>Rough draft #2 of presentation due (20pts), Visualize your Aims</i>	Proteomics 1: Biological Networks
March 26th, 2024		<b>SPRING BREAK</b>	
March 28th, 2024		<b>SPRING BREAK</b>	
April 2nd, 2024	Animal Sciences 150	<b>Adam Steinberg will present</b>	<b>LAB10: Guest Speaker: Adam Steinberg: ArtForScience, bring your Rough Draft of Talk to class</b>
April 4th, 2024	Genetics 1408		Proteomics 2: SILAC
April 9th, 2024	Animal Sciences 150	<b>Webpage #2 due: Homepage-Interaction networks (20pts)</b>	<b>LAB 11:</b> Aims work in groups ( <b>Specific Aims Day 3, 20pts</b> ) & Website work and feedback
April 11th, 2024	Genetics 1408		Proteomics 3: Quantitative proteomics & iTRAQ
April 16th, 2024	Animal Sciences 150	<b>Specific Aims Draft #2: Aims 1-3 (20pts)</b>	<b>CLASS FUN (Peer review will be assigned for Aims)</b>
April 18th, 2024	Genetics 1408	<b>Adam Steinberg will present</b>	<b>SPECIAL LAB:</b> Final Presentation group work with Adam Steinberg in your peer groups
April 23rd, 2024	Animal Sciences 150		<b>Final Presentations: 6 talks</b>
April 25th, 2024	Genetics 1408		<b>Final Presentations: 4 talks</b>
April 30th, 2024	Animal Sciences 150		<b>Final Presentations: 6 talks</b>
May 2nd, 2024	Genetics 1408		<b>Final Presentations: 4 talks</b>
May 10th, 2024	<b>FINAL EXAM</b>	<b>Final Project Due on Website (100 Total pts), Final talk PDF on website (20pts) &amp; Specific Aims Final Draft (B/G + All 3 aims) (100pts)</b>	<b>Final web project due, Written version of final talk becomes the conclusion page on website &amp; Final draft of Specific Aims pasted and uploaded to website (11:59pm deadline)</b>

## Gen 564 Grade Breakdown 2024

### **Specific Aims: (total points: 280pts)**

- **Specific Aims Day 2:** Students divide into groups & Class discussion **(20pts)**
- **Specific Aims Homework #1:** Peer review previous Gen564 students' specific aims **(20pts)**
- **Specific Aims Draft #1** Students submit Background/GAP + Aim1-2 (Website upload + Canvas) **(100pts)**
- **Specific Aims Day 3:** Peer review class discussion time **(20pts)**
- **Specific Aims Draft #2:** Peer review only **(20pts)**
- **Specific Aims Final Draft:** Students hand in final draft (with 3 Aims) to be graded using FINAL Rubric **(100pts)**

### **Final presentations: (total points: 160pts)**

- **Rough draft #1:** PPT/KEY/PDF format uploaded to your website **(20pts)**
- **Rough draft #2:** PPT/KEY/PDF format uploaded to your website **(20pts)**
- **Final talk:** PDF format uploaded to your website **(20pts)**
- **Final Presentation:** presentation graded **(100pts)**

### **First Group Presentation (Tuesday): (100pts)**

### **Participation: (100pts total)**

- Blog questions (50pts) + Class Participation (50pts)

### **Final Website: (140pts total)**

- Website Intro deadline (20pts) + Website #2 (20pts) + FINAL Website (100pts)

### **Extra Credit (60pts)**

**TOTAL: 840pts**

\*Any late submissions incur a 5pt late fee/day