SJU Bio 1022/25 GENETICS LAB Course Schedule - Spring 2008

Note: ***If any lab is cancelled as a snow day, you need to find out what must be completed <u>the first day classes are back in session</u>. Plants, flies, and bacteria don't stop growing for snow days!***

Dates	**In lab this week:**	**Due* this week:**
Jan. 14-18 MONDAY - FRIDAY	Choose teams / Rules & Course Expectations Lab 1a: Mitosis Lab 2a: plant F2 seeds	(Turn in worksheet at end of class)
Jan. 21-22 M, Tu	*No Lab Monday or Tuesday, Wed starts new cycle*	*Be sure to check on plants Tues or Wed*
Jan. 23-25,28,29 WED-FRI, MON,TUE	Lab 1b: Mitosis & Meiosis Lab 2: W-F: 1 week obs / **M & T: 2 week count** Lab 3a: Examine fly mutants, learn tech, pick mutants	(Turn in worksheet at end of class)
Jan 30-Feb 1, 4, 5 WED-FRI, MON,TUE	Lab 2b: Plant F2 generations - corn seed analysis & χ^2 Lab 2c: **W-F: 2 week count /** M & T: 3 wk update *Use 1 wk count tobacco / 2 week counts (others) for lab report unless instructed otherwise by your teacher*	(in class: blue , yellow & green worksheets) Turn in Green sheet as assigned by instructor if not done in lab
Feb. 6-8, 11, 12♥ WED-FRI, MON,TUE	Lab 2c: 3 week updates/observations Visiting researcher talks about *Drosophila* Lab 3b: Drosophila Crosses: wild x mutant PxP reciprocal crosses	Plant report draft check ♥ A teammate must clear fly vials between 7:30 and 9 am prior to your lab this week.
Feb. 13-15, 18,19 WED-FRI, MON,TU	Lab 3c: Clear PxP vials **LAB PRACTICAL I** on Labs 1 & 2 (M&M, plant/corn F2)	**#2 Plant F2 lab report due**
Feb. 20-22, 25, 26 WED-FRI, MON,TU	Lab 3d: Drosophila F1 counts, set up F1 x F1 crosses F1 predictions quiz **Continue counting F1 until break!! Post counts!**	fly F1 predictions worked in notebk, quiz today
Feb 27-29 WED-FR BEFORE BK March 10, 11 MON, TU AFTER BK	Wed, Th, Fri labs – Lab 3e clear F1 from F1xF1 vial **Each student meets with instructor for oral quiz today** Library sessions on searching for articles (times posted) and/or Double Helix film with remaining lab time (TBA)	fly prelim analysis & F2 predictions worked in notebk, be ready to explain
March 3-7	*Spring Break* - Lab 3e (clear F1 parents) Dr. R will clear F1 from F1xF1 vials for Monday & Tuesday labs.	Feb 29 = end of quarter
Mar 12-14, 17,18 WED-FRI, MON,TU	Lab 3f: count F2 offspring listen for lab start time this wk T=21 day, you should have hundreds. Count at least 100 flies for each cross. Confirm phenotypes and compare to your predictions. Triple-check gender/phenotype that appears in any unpredicted category!!	Fly lab report draft check (F1 sections can be done now)
Mar 20-21, 24	No lab Holy Thursday, Good Friday, Easter Monday Wedn evening meets for lecture	
Mar 25-28, 31 TUES-FRI, MON	Lab 4a: Aseptic Techniques Teacher will introduce our conjugation exp	Count colonies in 1-2 days You should be finishing fly report, running F2 chi squares
Apr 1-4, 7 TUES-FRI, MON	Lab 4b: Bacterial Conjugation Teacher will explain calculations	**#3 *Drosophila* Lab report** Count colonies in 1-2 days
Apr 8-11, 14 TUES-FRI, MON	Lab 4c: DNA Plasmid Isolation Lab 4d: DNA Gel Electrophoresis Gel will run until evening, stained overnight Be sure to pick up gel results in 1-2 days.	Bacterial problems homework *Mon lab has draft check*
Apr 15-18 TUES-FRI	Genetics Jeopardy Competition *(Review for practical)* in Tues 2pm, Thurs 2:30, Friday 2 pm la sections Students from Mon are invited to Tu, Th, or Fri games	Bacterial lab draft check
Apr 21-25 MONDAY - FRIDAY	**LAB PRACTICAL II** on Labs 3 and 4 (flies, bacteria) Notes: Last lab meeting, there is no " lab" final exam. Last day any late reports can be accepted is April 30 (late penalties apply)	**#4 Bacterial Conjugation Lab Report** (report includes gel standard curve)

***Reports, predictions, drafts, homeworks are due at the start of your regular lab section.**

GENETICS LAB course schedule grid by lab up to break Spring 2008

Week of:	**Lab 1**	**Lab 2 Plant F2**	**Lab 3 Drosophila**	**Lab 4 Bacteria**	**Events**
Jan. 14-18 MONDAY - FRIDAY	1a: Mitosis	2a plant seeds			
Jan. 23-25,28,29 WED-FRI, MON,TUE	1b: Mitosis & Meiosis	1 week observations (or 2 week counts)	3a observe flies learn sexing		
Jan 30-Feb 1, 4, 5 WED-FRI, MON,TUE		2b: corn F2 kernel analysis (3 wkshts) 2c: 2 or 3 week counts			
Feb. 6-8, 11, 12♥ WED-FRI, MON,TUE		2c: 3 week observations due: report draft check	Come in and clear fly vials in the morning before your lab Visiting researcher talks about *Drosophila* 3b: set up reciprocal rosses (PxP mutant x wild)		
Feb. 13-15, 18,19 WED-FRI, MON,TU	*Covered on practical*	**Due: Plant F2 lab report** *Covered on practical*	3c: Clear PxP vials		Practical I (labs 1 & 2)
Feb. 20-22, 25, 26 WED-FRI, MON,TU			3d: Drosophila F1 counts, set up F1 x F1 crosses due: F1 predictions (quiz)		
Feb 27-29 WED-FR BEFORE BK			3e (clear F1 parents) Wed- Fri: Prelim analysis F2 predictions due (oral quiz)		
Spring Break March 3-7			Dr. R clears for Mon & Tues		

GENETICS LAB course schedule grid by lab after break Spring 2008

Week of:	**Lab 1**	**Lab 2 Plant F2**	**Lab 3 Drosophila**	**Lab 4 Bacteria**	**Events**
March 10, 11 MON, TU AFTER BK			Mon & Tues Prelim analysis /F2 predictions due (oral quiz)		
Mar 12-14, 17,18 WED-FRI, MON,TU			3f: count F2 offspring Fly lab draft chk (F1 parts)		
Mar 20-21, 24					Easter No lab Thur-Mon
Mar 25-28, 31 TUES-FRI, MON				4a: Aseptic Techniques	
Apr 1-4, 7 TUES-FRI, MON			**Due:** *Drosophila* F1 & F2 Lab Report	**4b: Bacterial Conjugation**	
Apr 8-11, 14 TUES-FRI, MON				Lab 4c: DNA Plasmid Isolation 4d: DNA Gel Due: Bacterial problems	
Apr 15-18 TUES-FRI					***Genetics Jeopardy*** *Monday invited to any of the games*
Apr 21-25 MONDAY - FRIDAY				Due: **Bacterial Conjugation** Lab Report Includes gel standard curve *Covered on practical*	**Practical II (labs 3 &4)**