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## PRELIMINARY SCHEDULE

**Molecular**

### Genetics BIOR61, 20 March - 2 June, 2017

170314

Department of Biology, <http://www.biology.lu.se/education>

Director of Studies, incl contact details: Carin Jarl-Sunesson, [carin.jarl-sunesson@biol.lu.se](mailto:carin.jarl-sunesson@biol.lu.se), Course Responsible: Mats Hansson, [mats.hansson@biol.lu.se](mailto:mats.hansson@biol.lu.se)

Teachers: Marita Cohn (MC), Mats Hansson (MH), Claes von Wachenfeldt (CvW), Allan Rasmusson (AR), Torbjörn Säll (TS), Staffan Bensch (SB), Maria Strandh (MS), Beer Sen (BS), Raphael Gollnisch (RG), Agnieszka Zygadlo Nielsen (AZN), Ulf Olsson (UO)

Location for Introduction: Biology building, House D, Room 205, Sölvegatan 35, 23251 Lund

Teaching activities: L (lecture), Sem (seminar), G (group exercise), Lab, Proj (Project), Ind (Independent studies)

*All activities except lectures (marked L) are compulsory. If you are absent from a compulsory activity without a valid reason you are not guaranteed to complete this part until the next time the course is offered. A valid reason is e.g. that you are ill, but not that you are travelling!*

Literature: Craig, N.L., Cohen-Fix, O., Green, R., Greider, C.W., Storz, G., Wolberger, C. "Molecular Biology. Principles of Genome Function". 2nd ed. 2014. Oxford University Press, Oxford, UK.

Web page: Web page: L@L. Students have access around 1 week before the start of the course

Date	Time	Activity	Description	Teacher	Location
Mo. 20 March	13.15-15.00	Sem	Introduction, Compulsary!	MH	D: 205
Tu. 21 March	13.00-15.00	L	DNA- and chromosome structure I	MC	
We. 22 March	10.00-12.00	L	DNA- and chromosome structure II	MC	
	13.00-15.00	Lab	Group B: Computer lab I: Sequence analysis exercise. Identification of open reading frames.	MC	
Th. 23 March	10.00-12.00	L	DNA sequencing on a small and large scale	MH	
	13.00-17.00		No scheduled classes		
Fr. 24 March	09.00 - 11.00	Lab	Group A: Computer lab I: Sequence analysis exercise. Identification of open reading frames.	MC	
	13.00 - 15.00	L	DNA replication I	KF	
Mo. 27 March	09.00-12.00	Lab	Group B: Computer lab II: "sequence analysis"	MS	
	13.00-16.00	Lab	Group A: Computer lab II: "sequence analysis"	MS	
Tu. 28 March	10.00-12.00	Sem	Group A: Journal Club Chromosome structure	MC	
	09.00-12.00	Lab	Group B: Lab: Introduction and preparations	BS, RG	
	13.00-16.00	Lab	Group A: Lab: Introduction and preparations	BS, RG	
	13.00-15.00	Sem	Group B: Journal Club Chromosome structure	MC	
We. 29 March	09.00-13.00	Lab	Group A: Lab 1: Day1 DNA isolation from tissue and food	BS, RG	



Th. 30 March	10.00-12.00	L	DNA replication II	KF	
	12.30-13.30		Information om att söka kurser och program inför höst 2017 (på svenska)	Lotta, Tina	Röda Rummet
	13.00-17.00		No scheduled classes		
Fr. 31 March	09.00-13.00	Lab	Group B: Lab 1: Day 1 DNA isolation from tissue and food	BS, RG	
Mo. 3 April	09.00-10.30	Lab	Group A: Lab 1, Day 2 Start PCR	BS, RG	
	10.30-12.00	Lab	Group B: Lab 1, Day 2 Start PCR	BS, RG	
	13.00-15.00	Lab	Group A: Lab 1, Day 3 Electrophoresis	BS, RG	
	15.00-17.00	Lab	Group B: Lab 1, Day 3 Electrophoresis	BS, RG	
Tu. 4 April	09.00-12.00	Lab	Group A: Lab 1, Day 4	BS, RG	
	10.00-12.00	Sem	Group B: Journal Club Replication	KF	
	13.00-16.00	Lab	Group B: Lab 1, Day 4	BS, RG	
	13.00-15.00	Sem	Group A: Journal Club Replication	KF	
We. 5 April	09.00-10.15	L	Yeast mating	MC	
	10.30-12.00	Lab	Lab 2: Yeast mating, day 1	MC	
	13.00-15.00	L	Transcription I	CvW	
Th. 6 April	08.00-10.00	L	Transcription II	CvW	
	10.30-12.00	Lab	Lab 2: Yeast mating, day 2	MC	
	13.00-17.00		No scheduled classes		
Fr. 7 April	09.00-11.00	Sem	Group A: Journal Club Transcription	CvW	
	13.00-15.00	Sem	Group B: Journal Club Transcription	CvW	
Mo. 10 April		Ind	Self studies		
Tu. 11 April		Ind	Self studies		
We. 12 April		Ind	Self studies		
Th. 13 April			Easter holiday		
Fr. 14 April			Easter holiday		
			Easter holiday		
Mo. 17 April			Easter holiday		
Tu. 18 April	10.00-11.00	L	RNA processing Introduction	AR	
We. 19 April	09.00-10.45	L	Responses to DNA damage	KF	
	11.00-12.15	Lab	Lab 2: Yeast mating, day 3	MC	
Th. 20 April	10.00-12.00	L	DNA repair	AR	
	13.00-17.00		No scheduled classes		
Fr. 21 April	10.00-12.00	L	Recombination	KF	
Mo. 24 April	09.00-all day	Lab	Group B: Lab 3: The SOS response	BS, RG	
Tu. 25 April	09.00-12.00	Sem	Group A: RNA processing seminars	AR	
We. 26 April	09.00-12.00	Sem	Group B: RNA processing seminars	AR	
Th. 27 April	10.00-12.00	Sem	Group A: Journal Club Recombination	KF	
	13.00-18.00		Re-exam courses spring period 1		
Fr. 28 April	09.15-all day	Lab	Group A: Lab 3: The SOS response	BS, RG	
	14.00-16.00	Sem	Group B: Journal Club Recombination	KF	
Mo. 1 May			No scheduled classes		
Tu. 2 May	09.00-10.00	Lab	Extra Lab-time if needed.	BS, RG	
	10.00-12.00	L	Translation I	CvW	
We. 3 May	10.00-12.00	Sem	Synthetic biology	AZN	
	13.00-15.00	L	Translation II	CvW	



Th. 4 May			Preparation for seminars		
	13.00-17.00		No scheduled classes		
Fr. 5 May	10.00-12.00	Sem	Group B: Journal Club Translation	CvW	
	13.00-15.00	Sem	Group A: Journal Club Translation	CvW	
Mo. 8 May	09.00-all day	Lab	Group A: Lab 4: Translation error	BS?, RG	
Tu. 9 May	09.00-all day	Lab	Group B: Lab 4: Translation error	BS?, RG	
We. 10 May	09.00-12.00	Lab	Group A: Lab 5, Day 1 DNA prep & PCR	BS?, RG	
	13.00-16.00	Lab	Group B: Lab 5, Day 1 DNA prep & PCR	BS?, RG	
	17.00-19.30		Biologer i utbildning och arbetsliv. Alumnerna berättar om sin väg ut i arbetslivet (på svenska). Grillning startar 18.30, OBS anmälan	Blå hallen, Ekologihuset	
Th. 11 May	09.00-10.00	L	Genetics of adaptations in wild organisms - methods	SB	
	10.00-13.00	Lab	All: Lab 5, Day 2 Electrophoresis etc.	BS?, RG	
	13.00-17.00		No scheduled classes		
Fr. 12 May	08.30-10.30	Lab	Group B: Lab 5, Day 3 Prep. for sequencing	BS?, RG	
	10.30-12.30	Lab	Group A: Lab 5, Day 3 Prep. for sequencing	BS?, RG	
Mo. 15 May	10.00-12.00	L	Genetics of adaptations in wild organisms - examples	SB	
Tu. 16 May	10.45-12.30	Sem	Group B: Journal Club Adaptations	SB	
	13.30-15.15	Sem	Group A: Journal Club Adaptations	SB	
We. 17 May	14.00-16.00	Sem	Spirit of Hven	UO	
Th. 18 May	10.00-12.00	L	Genetic diseases	TS	
	13.00-17.00		No scheduled classes		
Fr. 19 May			Preparation for seminar		
Mo. 22 May	10.00-12.00	L	The evolving genome	TS	
Tu. 23 May	10.00-12.00	Lab	Group B: Lab 5: Analysis DNA sequences	BS, RG	
	13.00-15.00	Lab	Group A: Lab 5: Analysis DNA sequences	BS, RG	
We. 24 May			Preparation for seminar		
Th. 25 May			Holiday, Ascension Day		
Fr. 26 May			Holiday		
Mo. 29 May	10.00-12.00	Sem	Group A: Journal Club Genetics	TS	
	13.00-15.00	Sem	Group B: Journal Club Genetics	TS	
Tu. 30 May			Preparation for exam		
We. 31 May			Preparation for exam		
Th. 1 June	10.00-12.00		Question time	AR, MC, MH, TS, KF, CvW, BS, RG, SB	
	13.00-17.00		No scheduled classes		
Fr. 2 June	09.00-14.00	Exam	Final exam		



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Sa. 3 June					
Su. 4 June					
21-25 Aug			Re-sit exams, <a href="http://www.biology.lu.se/resit-exams">http://www.biology.lu.se/resit-exams</a>		