

Schedule Structural Biochemistry (KB7010) Autumn 2019

Schedule Structural Biochemistry -19			
Morning 09.00-12.00		Afternoon 13.00 - = 17.00	
Mo	2-Sep	10.00 Course introduction (MH)	13.00 information for masters students (C458); 14.00 PyMol + study amino acids (DR/JJ/SK/JB)
Tues	3-Sep	Functional structures of the cell (JWdG)	Structure-Function 1 (DR/JJ/SK/JB)
Wed	4-Sep	Protein purification (DDa)	Write Lab Reports
Thurs	5-Sep	Macromolecular structure 1, Building blocks and rules(XX)	Structure-Function 2 + TEST (amino acids) (DR/JJ/SK/JB)
Fri	6-Sep	Macromolecular structure 2, Structure-function examples(XX)	Structure-Function 3 (DR/JJ/SK/JB)
	7-Sep		
	8-Sep		
Mo	9-Sep	Macromolecular structure 3, Membrane protein structure/lipids (DDr)	Write Lab Reports / Study
Tues	10-Sep	Write Lab Reports	Write/Submit Str-Fu 1-3 reports for peer review (deadline 18.00)
Wed	11-Sep	Crystallization (PS)	Crystallization Practical Group 1 (DR/JJ/SK/JB)
Thurs	12-Sep	Write Lab Reports / Study	Crystallization Practical Group 2 (DR/JJ/SK/JB)
Fri	13-Sep	X-ray Crystallography 1 (MH), X-ray Sources (MB)	Crystallization Practical Group 3 (DR/JJ/SK/JB)
	14-Sep		
	15-Sep		
Mo	16-Sep	X-ray Crystallography 2 (MH)	Structure-Function 4 (DR/JJ/SK/JB)
Tues	17-Sep	Write Lab Reports / Study	Structure-Function 5 (DR/JJ/SK/JB)
Wed	18-Sep	X-ray Crystallography 3 (MH)	Write/Submit Str-Fu 4-5 reports for peer review (deadline 18.00)
Thurs	19-Sep	X-ray data processing / molrep demo lecture (MH)	Write Lab Reports / Study
Fri	20-Sep	Write Lab Reports / Study	Write Lab Reports / Study
	21-Sep		
	22-Sep		
Mo	23-Sep	Look at crystals, take pictures, discuss results (in groups) (DR/JJ/SK/JB)	Write Lab Reports / Study
Tues	24-Sep	Crystal mounting and Data collection, Group 1+2+3 - Full Day Practical	Computer room, work on reports, assistants available (DR/JJ/SK/JB)
Wed	25-Sep	Data processing and molecular replacement - Full day practical (no report)	Data processing recap (DR/JJ/SK/JB)
Thurs	26-Sep	Electron density (DR/JJ/SK/JB)	Write Lab Reports / Study
Fri	27-Sep	Structure Tools (DR/JJ/SK/JB)	Write Lab Reports / Study
	28-Sep		
	29-Sep		
Mo	30-Sep	Write Lab Reports / Study	Write Lab Reports / Study
Tues	1-Oct	Write Lab Reports / Study	Write Lab Reports / Study
Wed	2-Oct	Write Lab Reports / Study	Deadline all reports SF 1-3 + SF 4-5 + crystallization + crystal mount/data collection + Electron density + Structure tools
Thurs	3-Oct	NMR 1 (LM)	NMR practical 1 (FY/JP) Group A / Write Lab reports
Fri	4-Oct	NMR 2 (LM)	NMR practical 2 (FY/JP) Group A / Write Lab reports
	5-Oct		
	6-Oct		
Mo	7-Oct	NMR 3 (LM)	NMR practical 1 (FY/JP) Group B / Write Lab reports
Tues	8-Oct	NMR 4; Protein dynamics (LM)	NMR practical 2 (FY/JP) Group B / Write Lab reports
Wed	9-Oct	Write Lab Reports / Study	NMR practical 1 (FY/JP) Group C / Write Lab reports
Thurs	10-Oct	Write Lab Reports / Study	NMR practical 2 (FY/JP) Group C / Write Lab reports
Fri	11-Oct	Write Lab Reports / Study	Write Lab Reports / Study
	12-Oct		
	13-Oct		
Mo	14-Oct	Computational biochemistry 1 (VK)	Write Lab Reports / Study
Tues	15-Oct	Computational biochemistry 2 (VK)	Computational biochemistry practical - New practical, Ville to develop
Wed	16-Oct	Write Lab Reports / Study	Write Lab Reports / Study
Thurs	17-Oct	QnA about practicals with assistants (all)	Deadline all reports except Cryo-EM
Fri	18-Oct	Study time	Study time
	19-Oct		
	20-Oct		
Mo	21-Oct	Study time and prepare questions for recap sessions,	
Tues	22-Oct	Recap, sessions (JWdG) 9-10; X-ray (MH) 10-12	Study time
Wed	23-Oct	NMR recap session (LM)	Study time
Thurs	24-Oct	Cryo-EM (AA)	Cryo-EM practical (VT/AP/VS)
Fri	25-Oct	Cryo-EM (AA)	Cryo-EM practical (VT/AP/VS)
	26-Oct		
	27-Oct		
Mo	28-Oct	Cryo-EM (AA)	Cryo-EM practical (VT/AP/VS)
Tues	29-Oct	Cryo-EM (AA)	Cryo-EM practical (VT/AP/VS)
Wed	30-Oct	Cryo-EM discussion: recap, questions (AA)	Study time
Thurs	31-Oct	Study time	Study time
Fri	1-Nov	Exam	

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Lecture (K247)
Supervised computer practical
Supervised wet-lab practical
Deadline/Exam
Unsupervised work

Teachers

MH	Martin Högbom
Dda	Dan Daley
PS	Pål Stenmark
VK	Ville Kaila
DDr	David Drew
JWdG	Jan-Willem de Gier
MB	Matthew Bennett
LM	Lena Mäler
AA	Alexey Amunts

Assistants for practicals

FY	Fan Yang
JP	Joan Patrick
DR	Daniel Rehling
JJ	Juliane John
SK	Sara Kosenina
JB	Jens Berndtsson
VT	Victor Tobiassson
AP	Annemaria Perez
VS	Vivek Singh

DATE	TIME	Lab / Practical	Description
Fri 2 sep	18:00	Structure-Function 1-3	Send for peer-review
Mon 5 sep	18:00	Structure-Function 1-3	Send back to student, after constructively criticism
Fri 9 sep	23:00	Structure-Function 1-3	Send final report to TAs
Wed 14 sep	18:00	Structure-Function 4-5	Send for peer-review
Fri 16 sep	18:00	Structure-Function 4-5	Send back to student, after constructively criticism
Fri 30 sep	23:00	Struc/Func + Electron dens + Tools + Xtal + Molecular rep.	Send final reports to TAs
Fri 7 oct	23:00	SAXS	Send final report to TAs
Fri 21 oct	23:00	NMR	Send final report to TAs
Tues 25 oct	18:00	ALL REPORTS	All reports have to be handed in this day to take the exam.