

CHEM 489-503 – Special Topics: Metals in Biology and Medicine

Tentative Course Schedule

DATE	LECTURE/ PRESENTATION	TOPIC	SPEAKER or PRESENTER(S)	DISCUSSION LEADER
Jan. 19	Lec. 1	Introduction/Overview	MYD	
21	Lec. 2	Biological Metals and Ligands	MYD	
26	Lec. 3	Peptides and Metal Binding Sites	MYD	
28	Lec. 4	Fundamentals of Coord. Chem.	MYD	
Feb. 2	Lec. 5	Physical Methods: X-ray, Magnetism	MYD Dr. Joe Reibenspies	
4	Lec. 6/Case Study 1	O ₂ and Hemoglobin	MYD	
9	Lec. 7/Case Study 1	O ₂ Management	MYD	
11	Lec. 8/Case Study 1	Non-Heme Iron Proteins	MYD	
16	Lec. 9/Case Study 2	Cis-Platin	Masuto Hirai Michael Woodie	Matt & Allen
18	Lec.10/Case Study 2			
23	Lec.11	Discuss CS 1 and 2		
25	EXAM I / Lec. 12			
Mar. 2	Lec.13/Case Study 3	Vitamin B-12	Ruben Lopez Blake Whitlow	Amir
4	Lec.14/Case Study 4	Vanadium	Allen Lunsford	Philip
9	Lec.15/Case Study 5	NO as Ligand to Iron in Biology	Rachel Chupik Chris Costanzo	David
11	Lec.16/Discuss.			
16	SPRING BREAK			
18				
23	Guest lecturer		Dr. Dave Barondeau	
25	Guest lecturer		Dr. Paul Lindahl	
30	Case Study 6	Copper Proteins and Selected Enzymes	David Crochet	Masuto & Ruben
Apr. 1				
6	Discuss/Review			
8	EXAM II			
13	Case Study 7	Medical Applications of Gold: Anti-arthritis and Anti-cancer	Bob DeBorde Matt Ledbetter	Michael
15				
20	Case Study 8	Hydrogenase	Philip Duttweiler	Bob & Blake
22				
27	Case Study 9/	CODH	Amir Safi-I	Rachel & Chris
	Frontiers Lectures	Electron Transfer Through Proteins	Dr. Harry Gray	
29				
May 4		Review & MYD b'day party		
7	FINAL EXAM 12:30-2:30			