LECTURE SCHEDULE FOR BIOE 577 WINTER QUARTER 2007
"CELL AND PROTEIN REACTIONS WITH FOREIGN MATERIALS"
T. HORBETT, PROF. Mon. Wed. Fri. 1:30-2:20 FSH 108

#	DAY	DATE	LECTURE TOPIC(S)	LECTURER
1	Wed.	Jan. 3	Introduction; history; relevance; course organization	T. Horbett
2	Fri.	Jan. 5	Protein adsorption: Phenomenology of protein behavior at solid/liquid, air/water, oil/water interfaces	T. Horbett
3	Mon.	Jan. 8	Protein adsorption: Methods #1: surveys; surfaces; buffers	T. Horbett
4	Wed.	Jan. 10	Protein adsorption Methods #2: proteins; the adsorption step; rinsing;	T. Horbett
5	Fri.	Jan. 12	Protein Adsorption Methods #3 quantitation of amount and state	T. Horbett
6	Mon.	Jan. 15	NO CLASS; MARTIN LUTHER KING JR. DAY	HOLIDAY
7	Wed.	Jan. 17	Protein adsorption: Single protein solutions: kinetics; isotherms;	T. Horbett
8	Fri.	Jan. 19	Protein adsorption: Irreversibility; thermodynamics; surface effects	T. Horbett
9	Mon.	Jan. 22	Multiple proteins; binary competition; Vroman effects	T. Horbett
10	Wed.	Jan. 24	Adsorption theory 1: Conformation and orientation	T. Horbett
11	Fri.	Jan. 26	Theory of protein adsorption: Chemical mechanisms & mathematical descriptions thermodynamics; surface effects	T. Horbett

#	DAY	DATE	LECTURE TOPIC(S)	LECTURER
12	Mon.	Jan. 29	Mid-term #1	T. Horbett
13	Wed.	Jan. 31	Cell Interactions 1: Anchorage dependency Non-adherent cells and adhesion	T. Horbett
14	Fri.	Feb. 2	Cell Interactions: Protein effects	T. Horbett
15	Mon.	Feb. 5	Cell Interactions: Surface effects	T. Horbett
16	Wed.	Feb. 7	Cell Interactions: Fibroblasts, fibronectin	T. Horbett
17	Fri.	Feb. 9	Cell Interactions: Corneal cells	T. Horbett
18	Mon.	Feb. 12	Cell Interactions: Endothelial cells	T. Horbett
19	Wed.	Feb. 14	Cell culture of mammalian cells	T. Horbett
20	Fri.	Feb. 16	Effects of polymers on cell growth	K. Hauch
21	Mon.	Feb. 19	PRESIDENTS' DAY	HOLIDAY
22	Wed.	Feb. 21	Cell Interactions: Platelets 1	T. Horbett
23	Fri.	Feb. 23	Cell Interactions: Platelets 2	T. Horbett
24	Mon.	Feb. 26	Cell interactions Platelets 3: Platelet procoagulant	T. Horbett
25	Wed.	Feb. 28	Mid-term #2	T. Horbett
26	Fri.	Mar. 2	Receptor Biology 1: Membranes and membrane proteins; Ligand binding; the Scatchard equation	T. Horbett
27	Mon.	Mar. 5	Receptor Biology 2: Overview of adhesion receptors	T. Horbett
28	Wed.	Mar. 7	Receptor Biology 3: overview, cont'd	T. Horbett
29	Fri.	Mar. 9	Receptors 4: Platelet receptors, regulation of integrins	T. Horbett or K. Hauch

Final exam to be given on 2:30-4:20 p.m. Monday, Mar. 12, 2007
*** Lecture schedule and outline is tentative, and may be changed.**