

WELCOME TO Biochemistry II 2025

BB 422/622

Syllabus & Policies

Registration

Texts and Websites

Pre-requisites

Biochemistry I

Orgo 2

Grading

homework & quizzes

Transition to Biochemistry II

from A1 and A2

	M	T	W	R	F
8-9:05		B2(Gajic&Lu)		B4(Ho&Gajic)	
9:05-9:55	A1 (SCI-113)		A1 (SCI-113)		A1 (SCI-113)
10:10-11:00					B6(Wu&Lu) 10:10
11:15-12:05					
12:20-1:10					
1:25-2:15				C1 1:30 (CAS-218)	
2:30-3:20	C3 2:30 (CAS-328)				C2 2:30 (SCI-115)
3:35-4:25					
4:40-5:30					
5:45-6:35		B3(KR-L&Lloyd)		B5(Gajic&Math)	
6:50-7:40	B1(KR-L&Lloyd) 6:00	5:30	Exam (7:15)	5:30	
7:55-8:45			Exam (9:15)		
9:00-9:50					
10:05-10:55					

Lab Time	Lab Section	Appropriate Pre-lab Discussion Section		
		C3	C1	C2
		M (2:30-3:30)	R (3:30-2:30)	F (2:30-3:30)
M 6:00pm	B1	YES	YES	YES
T 8:00am	B2	YES	YES	YES
T 5:30pm	B3	YES	YES	YES
R 8:00am	B4	YES	NO	NO
R 5:30pm	B5	YES	YES	NO
F 10:10am	B6	YES	YES	NO
F 3:35pm	B7	YES	YES	NO

WELCOME TO Biochemistry II (BB 422/622)

This course is Dedicated to the memory
of Sir Hans Kornberg



January 14, 1928 ~ December 16, 2019

Review of 421

Goals of 422

Review of chemical principles

Thermo

C/O cycles

Overview of Metabolism

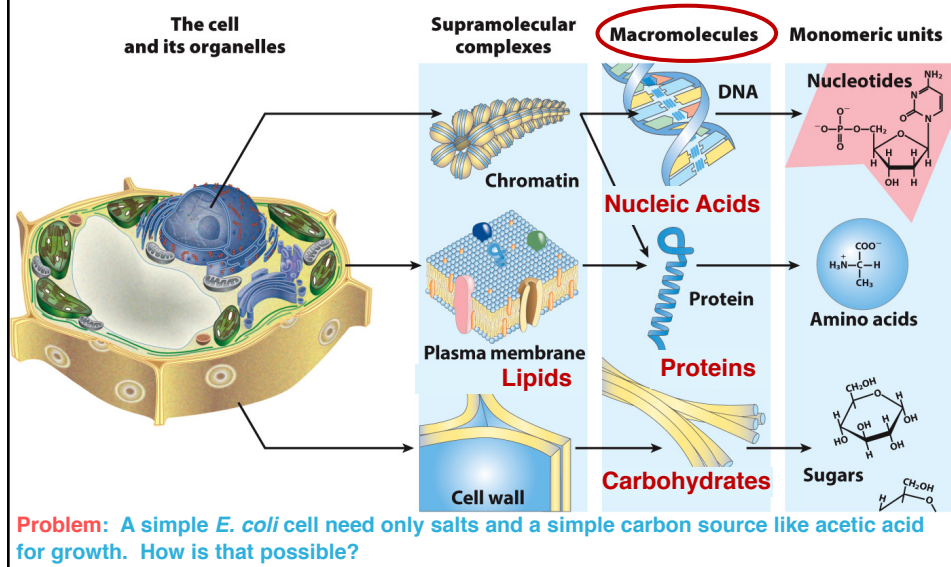
ATP cycles

Energy Coupling

Chemical Reactivity

Bioenergetics

Macromolecules are Key to Cellular Structures



Goals for Biochemistry II:

Problem: A simple *E. coli* cell need only salts and a simple carbon source like acetic acid for growth. How is that possible?

This semester we will answer this question, which relates all these macromolecular components, and in the process answer these questions:

- How are they interrelated?
- How are they synthesized from each other?
- What are the common chemical reactions and unique enzyme mechanisms?
- How is all this accomplished without breaking any of the rules of thermodynamics and organic chemistry?
- What are the clinical consequences if this intricate web of reactions is perturbed?

We will find the answers to all of these questions, which makes LIFE possible, by studying what is termed INTERMEDIARY METABOLISM

Let's hear from Professor Sir Hans Kornberg: