Chemical Systems III

CLASS MEETINGS

MWF 11:00–11:50 p.m. in person Olin 103

INSTRUCTION

Sunil Kumar (Sunil) Sunil.kumar97@du.edu

Instructor Office Hours Via appointment (email and zoom)

BOOKS

Slides from the lectures and the literature journals will be enough to learn about the course material.

Extra Books

Essentials of Chemical Biology by Andrew Miller and Julian Tanner.

COURSE DESCRIPTION

This course is meant to be an introduction to the investigation of various interactions/systems (biomolecular/organic/inorganic) using a battery of biophysics techniques. Required reading will be the primary literature discussed in class.

COURSE REQUIREMENTS

- 1. Midterm and Final exams (35% each)
- 2. A PowerPoint presentation related to class topics (30%)
- 3. Late assignments will be penalized 5% for each day past the deadline.

Date	Subject
27-March	What is biophysics?
29-March	Protein/nucleic acid refresher
31-March	Protein/nucleic acid refresher
3-Apr	CD
5-Apr	CD
7-Apr	ITC
10-Apr	ITC and Paper discussion
12-Apr	ITC and Paper discussion
14-Apr	SPR
17-Apr	SPR
19-Apr	NMR
21-Apr	NMR
24-Apr	NMR and Paper discussion
26-Apr	NMR and Paper discussion
28-Apr	NMR and Paper discussion
1-May	MIDTERM
3-May	Crystallography
5-May	Crystallography
8-May	Crystallography and Paper discussion
10-May	Crystallography and Paper discussion
12-May	Mass spec
15-May	Mass spec
17-May	Mass spec and paper discussion
19-May	Fluorescence
22-May	Class Presentations
24-May	
26-May	
31-May	
2-June	
5-June	FINAL EXAM