PHYSICAL CHEMISTRY LAB II

CHEM 3625

Spring 2023

Instructor: Matthew Rowley Office Hours: Daily 10:00 am – 11:00 am

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Please include the course number in the subject line of all correspondence.

Tentative Schedule

This class will meet on Thursdays from 3:30pm – 5:20pm in room 224 of the Science Center (SC)

Week 1: Jan. 9 - Jan. 13

No Lab

Week 2: Jan. 16 – Jan. 20

Group 1: Quantum Dots and Particle in a Box – A Spectroscopic Study

Group 2: Vibrational-Rotational Spectra of HCl/DCl

Week 3: Jan. 23 – Jan. 27

Group 3: Quantum Dots and Particle in a Box – A Spectroscopic Study

Group 4: Vibrational-Rotational Spectra of HCl/DCl

Week 4: Jan. 30 – Feb. 3

Group 1: Vibrational-Rotational Spectra of HCl/DCl

Group 2: Quantum Dots and Particle in a Box - A Spectroscopic Study

Week 5: Feb. 6 – Feb. 10

Group 3: Vibrational-Rotational Spectra of HCl/DCl

Group 4: Quantum Dots and Particle in a Box – A Spectroscopic Study

Week 6: Feb. 13 – Feb. 17

Group 1: Absorption Spectrum of Conjugated Dyes

Group 2: Computational Applications of Quantum Chemistry

Week 7: Feb. 20 – Feb. 24

Group 3: Absorption Spectrum of Conjugated Dyes

Group 4: Computational Applications of Quantum Chemistry

Week 8: Feb. 27 - Mar. 3

No Classes this week (Spring Break!)

Week 9: Mar. 6 – Mar. 10

Group 1: Computational Applications of Quantum Chemistry

Group 2: Absorption Spectrum of Conjugated Dyes

Week 10: Mar. 13 – Mar. 17

Group 3: Computational Applications of Quantum Chemistry

Group 4: Absorption Spectrum of Conjugated Dyes

Week 11: Mar. 20 - Mar. 24

Group 1: Photophysics of Pyrene

Group 2: Calculation of π -type Delocalized Orbitals Using Hückle Theory

Week 12: Mar. 27 – Mar. 31

Group 3: Photophysics of Pyrene

Group 4: Calculation of π -type Delocalized Orbitals Using Hückle Theory

Week 13: Apr. 3 – Apr. 7

Group 1: Calculation of π -type Delocalized Orbitals Using Hückle Theory

Group 2: Photophysics of Pyrene

Week 14: Apr. 10 – Apr. 14

Group 3: Calculation of π -type Delocalized Orbitals Using Hückle Theory

Group 4: Photophysics of Pyrene

Week 15: Apr. 17 – Apr. 21

Final Exam

Finals Week

No Final – You took it last week!