INSTRUCTOR INFORMATION

Instructor: Dr. Uri Samuni
Office: Remsen 26A
Office Hours: Tuesday and Thursday 11:00 am-12:00 pm (using online link of the online class) and also by appointment (email uri.samuni@qc.cuny.edu to set a time).
Telephone: 718-9974223
Email: uri.samuni@qc.cuny.edu

COURSE

Objectives: Mastery of selected modern Physical Biochemistry concepts and methods with emphasis on the properties, function and characterization of biochemicals, proteins and macromolecules.

Course Material: The course will consist of the lectures and specific reading assignments that will be posted on Blackboard.
Some recommended texts are:
2. Peter Atkins's Physical Chemistry (any recent edition, but preferably the 11ed)

Blackboard: Material, assignments and announcements will be posted to Blackboard. Announcements will also be sent via blackboard to your email address. Students must make sure to login to blackboard and check for announcements and check their Queens College e-mail. Link for the online session will be emailed to students via blackboard.

Exams: Exams are synchronous and timed online exams via blackboard. Exams are open book however you must work independently and adhere to CUNY’s policy of academic integrity. Suspected violations of CUNY’s policy will result in points reduction.

Covid-19 Effects: Covid-19 situation is a rapidly developing situation and could impact everyone. If you are impacted by Covid-19 and feel it is affecting your ability to succeed in the course then please contact the course instructor as soon as you can to seek assistance.

Technical Support: Email Helpdesk@qc.cuny.edu or call the Student Support Hotline (718-997-3000). If you are still having technical difficulties then please email the instructor to update.

Plagiarism: Students plagiarizing will receive a zero on the assignment in question and a warning. The second time that a student is caught will result in the automatic failure of the course.
Video recordings of online sessions:

Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

Restrictions on Sharing of Posted recordings:
Recordings that are posted (such as presentations, lectures, welcome video clips etc) are shared with the class for the purpose of facilitating the learning experience and are not to be copied, downloaded or shared with anyone outside of the class.

Grading:
**Chem378:** Midterm Exam (30%); Paper/s analysis (30%); Final Exam (cumulative) (40%); (Class attendance is strongly recommended). Bonus points: Response to questions in discussion section in Blackboard

**Bioch770:** Midterm Exam (30%), Paper/s analysis (15%); Paper/s Analysis/Additional topics (15%) Final Exam (cumulative) (40%); (Class attendance is strongly recommended). Bonus points: Response to questions in discussion section in Blackboard

Academic Accommodation:
Any student who feels that he or she may need an accommodation based upon the impact of a disability should contact the office of Services for Students with Disabilities (718-997-5870 and QC.SPSV@qc.cuny.edu) to coordinate accommodations.
See:https://www.qc.cuny.edu/StudentLife/services/specialserv. Student can also contact the instructor privately to communicate their need for accommodations.

CUNY Policy on Academic Integrity:
Academic Dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion as provided at https://www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/academic-integrity-policy/.

Netiquette:
Please maintain a professional demeanor when posting online and on online discussions forum. You can be respectful even when you have a difference of opinion. Treat others as you would want to be treated yourself.
TENTATIVE COURSE SCHEDULE

Tue 2/2    Course overview and Introduction to Spectroscopy
Th 2/4     Absorption Spectroscopy
Tue 2/9    Absorption Spectroscopy Instrumentation and methods
Th 2/11    Absorption Spectroscopy applications
Tue 2/16   Fluorescence Spectroscopy applications
Th 2/18    Fluorescence Spectroscopy applications
Tue 2/23   FRET applications
Th 2/25    Infrared Spectroscopy, FTIR and applications
Tue 3/2    Infrared Spectroscopy, FTIR and applications
Th 3/4     Raman Spectroscopy and applications
Tue 3/9    Resonance Raman Spectroscopy, SERS and applications
Th 3/11    Raman Microscopy, Confocal microscopy, Lasers
Tue 3/16   Protein Structure and Conformation, Protein Folding
Th 3/18    Peptides; Buffers; Protein Structure and Conformation
Tue 3/23   Online Midterm exam
Th 3/25    Hemoglobin: Cooperativity, Allosteric model; Hill Plots, Spectroscopic applications
Tue 3/30   No Class spring recess
Th 4/1     No Class spring recess
Tue 4/6    Hemoglobin: Cooperativity, Allosteric model; Hill Plots, Spectroscopic applications
Th 4/8     Discussion of papers (Protein folding/unfolding)
Tue 4/13   Protein-Protein interactions, protein folding, aggregation and MD simulations
Th 4/15      Protein-Protein interactions, protein folding, aggregation and MD simulations
Tue 4/20    Electron Microscopy TEM SEM CryoTEM
Th 4/22      Electron Microscopy TEM SEM CryoTEM
Tue 4/27    EPR Spectroscopy applications
Th 4/29      EPR Spectroscopy applications
Tue 5/4      Circular Dichroism and applications
Th 5/6     Circular Dichroism and applications
Tue 5/11    Dynamic Light Scattering (DLS)
Th 5/13     Dynamic Light Scattering (DLS)
Tue 5/25   Online final exam  8:30am – 10:30 am

Schedule is tentative