Aims of the Course:
1. To understand the principles of Physics that can help you design Computer Software and Hardware.
2. To give you experience in thinking to solve problems. Engineers solve (real world) problems.

Lecture/Recitation: Tuesday & Thursday, 1:40 PM – 3:30 PM ON-LINE
Dr. Larry Liebovitch: http://people.qc.cuny.edu/Faculty/Larry.Liebovitch/
Office Hours: Tuesday & Thursday 3:30 PM - 4:00 PM ON-LINE

Lecture Videos, Powerpoints, and other materials will be posted at:
https://drive.google.com/drive/folders/1siHU-Z2alZDmpOxnuMaA8HdQsGiFdYYC?usp=sharing

Textbooks (OPTIONAL):
- Hecht. College Physics, 12th Ed. (Schaum's Outlines, 2017)

Attendance in Lecture and Recitation is required and attendance will be taken
Grading Policy:

20% Exams
- Problems similar to those in the Recitation
- Midterm: March 25, 2021 (10% of course grade)
- Final Exam: (TBA, May 18-25, 2021) (10% of course grade)

20% Recitation Problems
- Done in ON-LINE recitation classes.
- Must attend on-line synchronous recitation for credit for that recitation.

30% Projects
- TWO executable PROGRAMS illustrating physics from the course, each WITH a VIDEO
  - #1 program+video due before 3:30 PM Thursday April 8, 2021 (late = 0 credit)
  - #2 program+video due before 3:30 PM Thursday May 6, 2021 (late = 0 credit)
- Topic must be approved, in advance, by the instructor
- Each Program+Video (15% of course grade)

10% Tech Meetup
- Attend ONE ON-LINE technology meetup on https://www.meetup.com
- Meetup must be approved, in advance, by the instructor
- Print description of meetup (minimum 200 words)
- Due before 3:30 PM Thursday April 29, 2021 (late = 0 credit)

20% Lab
- Labs using ON-LINE system

100% Course Grade = ALL of the Above
Policy on Missed Exams: There are NO makeups for missed exams, except for “exceptional circumstances” as determined exclusively by the instructor. (Note: sickness just before an exam or similar excuses are NOT “exceptional circumstances”.)

Policy on Recitation, Projects, Labs, and Meetup Reports: Must be submitted to the proper folder (or completed on Blackboard for Labs) on the class website by 3:30 PM on the date due, LATE = 0 credit. (even 1 minute late = 0)

Policy on Religious Observances: A student who will miss an academic obligation because of religious observance is responsible for contacting the instructor within the first two weeks of the semester.

Policy on COVID-19: Course adjustments due to changing circumstances may require that this syllabus be updated at any time.

Policy on Academic Dishonesty: Academic dishonesty is prohibited in The City University of New York. Academic dishonesty includes: cheating, plagiarism, obtaining unfair advantage, and falsification of records and official documents. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension or expulsion. The full Queens College policy is available at: https://www.qc.cuny.edu/StudentLife/services/studev/Documents/Academic%20Integrity%20Violation%20Form%20RV.pdf

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**Week | Tuesday | Topic | Chapter | Thursday | Topic | Activity**
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7 | 3/16/21 | R7: Recitation/Problems | Circuits - II | 3/18/21 | TBD: Fourier Transforms or Machine Learning

8 | 3/23/21 | L7: REVIEW FOR MIDTERM EXAM | | 3/25/21 | MIDTERM EXAM POSTED ON LINE 1:40- 3:30 PM

9 | 3/30/21 | NO CLASS | Spring Recess | 4/1/21 | NO CLASS | Spring Recess

10 | 4/6/21 | L8: Introduction to Quantum Mechanics - I | Raymer: pp. 299-313 | 4/8/21 | R8: Recitation/Problems | #1 Program/Video Due before 3:30 PM


12 | 4/20/21 | L10: Cryptography Private Key Encryption | | 4/22/21 | R10: Recitation/Problems | Crypto Keys and Quantum Matrices

